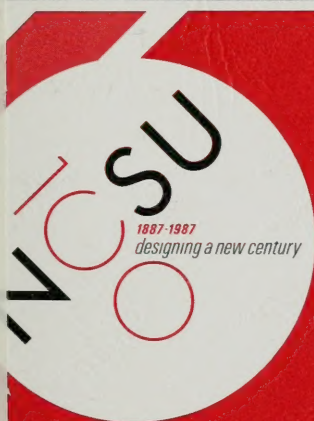


Digitized by the Internet Archive
in 2010 with funding from
NCSU Libraries



Main Hall and the first class . . .
c. 1889



1986-1987 UNIVERSITY DIRECTORY

North Carolina
State University

EMERGENCY
3333

1986-1987 UNIVERSITY DIRECTORY

Campus Operator 0
Outside Operator 9-0

University Information 737-2011
Student Information 737-3138

Emergency Numbers

Police, Fire, Ambulance, Emergency	3333
Medical Aid-Student Health Services	2564
or call Emergency	3333
Accidents involving radioactive materials—	
Call	2894
Nights, Saturdays, Sundays or holidays	787-8637
Physical Plant (during working hours)—	
To report malfunctions and breakdowns	
Control Center	2991

TELEPHONE REPAIR SERVICE

Telephone problems requiring repair should be reported to:

Southern Bell (line problems only)	800-222-8240
AT&T (equipment problems only)	800-242-2121

Be prepared to provide your telephone number, location, and the University Information number shown above when requesting repairs. If you are unsure of which telephone company to call for repair, dial 0.

TELEPHONE EQUIPMENT OR SERVICE CHANGES

The following procedure is applicable for ordering additions or changes in telephone service.

1. Contact the Telecommunications Office, ext. 2141 to secure technical information, if needed, prior to submitting a request.
2. Prepare a Service Unit Requisition form identifying the specific additions or changes desired. Identify the affected telephone numbers, room locations, type and color of telephone sets, and the name and telephone number of a contact person. Include your financial fund code. Submit the form to the Telecommunications Office, Box 7217 for processing.
3. Your request will be processed with the appropriate telephone company(ies) and your account charged on completion.

STATE TELECOMMUNICATIONS NETWORK

Official business calls to any point in the continental U.S. may be economically made using this system.

Rates: 12¢ per minute, in state
30¢ per minute, out of state

Dial 8—area code—seven digit number

Conference Calls: Up to 10 parties can be included by dialing 733-1110 and giving the operator required information. **Very Important:** Advance notice must be sent to each party so they will be available.

This directory is published in limited numbers by North Carolina State University for use by University personnel and is not for public distribution.

CONTENTS

Telephone Instructions	2
Administration	3
Schools, Departments, Divisions, Offices	5
Off-Campus Stations	30
County Extension Offices	30
Directory of Offices	35
Faculty and Staff	45
University Committees	237
Faculty Senate	244
Administrative Council	246
Building Liaison	247
Academic Calendar	251
Campus Map	254
Frequently Called Numbers	256

TELEPHONE INSTRUCTIONS

LOCAL CALLS

Campus telephones (737)—Dial last four digits.

Raleigh area telephones—Dial 9, then seven digit number.

LONG DISTANCE CALLS

State Telecommunications Network—Official business calls to any point in the continental U.S. may be economically made using this system. Rates are 12¢ per minute within the state and 30¢ per minute out of state.

Dial 8—area code—seven digit number.

Follow the instructions on the State Network credit card for credit card calls on this system.

Special Long Distance Calls—Person to Person, Credit Card (on rotary dial phones) and Charge to Third Number calls may be placed by dialing

9—0—area code (if not 919)—seven digit number,
operator will answer and assist.

Credit Card calls on touchtone phones

Dial 9—0—area code (if not 919)—seven digit number,
then follow instructions provided with your credit card.

Toll-free calls

Dial 9—1—800—seven digit number.

CALL TRANSFER

To transfer a call, remain on the line, depress the receiver button once and release. Listen for dial tone, then dial campus number desired. Stay on line until number answers, then announce call and hang up. Any incoming call may be transferred, whether it is from another campus phone or an off-campus location.

CONFERENCE CALLS

To add another party to existing conversation, depress receiver button once and release, then dial number desired. When the party answers, depress receiver button and release. All three parties will be on the line. Each campus telephone line can conference with two other parties, either on or off campus. Up to a 10 party conference may be established by calling the State Network operator at 733-1110 and providing required information. It is important that advance notice be given to participants so they will be available for the call.

CONSULTATION HOLD

To confer with a second party when you already have someone on the line, depress the receiver button and release. Listen for dial tone, dial number desired. The initial party cannot hear conversation. When conferring party hangs up, you are automatically reconnected to the initial caller.



NORTH CAROLINA STATE UNIVERSITY ADMINISTRATION

ZIP CODE 27695

Chancellor	Bruce R. Poulton	A Holladay, Box 7001	2191, 2192
Provost and Vice Chancellor	Nash N. Winstead	109 Holladay, Box 7101	2195
Interim Dean of the Graduate School	Debra Stewart	103 Peele, Box 7102	2394
Vice Chancellor for Develop- ment	John T. Kanipe Jr.	12 Holladay, Box 7501	2846
Vice Chancellor for Extension and Public Service	W. L. Turner	200 McKimmon, Box 7401 ..	2144
Vice Chancellor for Finance and Business	George Worsley	B Holladay, Box 7201	2155
Vice Chancellor for Research	Franklin D. Hart	208 Daniels, Box 7003	2117
Vice Chancellor for	Thomas H. Stafford Jr.	101 Holladay, Box 7301	2446, 2447
Student Affairs			
Director of University Relations	Albert B. Lanier Jr.	17 Holladay, Box 7501	2850
Executive Assistant to the Chancellor	Karen R. Peterson	A Holladay, Box 7001	3062
Secretary of the University	William H. Simpson	A Holladay, Box 7001	2200
University Counsel	Becky R. French	A Holladay, Box 7001	2319

DEANS OF THE SCHOOLS

Agriculture and Life Sciences	D. F. Bateman	112 Patterson, Box 7601	2668
Design	Claude E. McKinney ..	200-A Brooks, Box 7701	2201, 2202, 2208
Education	Carl J. Dolce	208-C Poe, Box 7801	2231, 2232
Engineering	Larry K. Monteith	102 Page, Box 7901	2312
Forest Resources	Eric L. Ellwood	2028-H Biltmore Box 8001	2883, 2884
Humanities and Social Sciences	William B. Toole III	106 Link, Box 8101	2467
Physical and Mathematical Sciences	Garrett Briggs	122 Cox, Box 8201	2501, 2502
Textiles	Dame S. Hamby	101 Nelson, Box 8301	3231
Veterinary Medicine	T. M. Curtin	4700 Hillsborough St. Box 8401	829-4210

THE UNIVERSITY OF NORTH CAROLINA GENERAL ADMINISTRATION

Chapel Hill Central Telephone	919-962-1000
President	C. D. Spangler Jr.
Vice President—Academic Affairs	Raymond H. Dawson
Vice President—Communications (Acting)	Wyndham Robertson
Vice President—Finance	L. Felix Joyner
Vice President—Planning	Roy Carroll
Vice President—Public Affairs	Jay Robinson
Vice President—Research	Jasper D. Memory
Vice President—Student Services and Special Programs	Lloyd V. Hackley
Secretary of the University	John P. Kennedy Jr.
Assistant to the President (for Legal Affairs)	Richard H. Robinson Jr.

910 Raleigh Road
Chapel Hill 27514

NCSU BOARD OF TRUSTEES

Wallace J. Conner
Newport, N.C.

Alan T. Dickson
Charlotte, N.C.

Troy A. Doby Sr.
Raleigh, N.C.

John N. Gregg
Valley Forge, Pa.

Daniel C. Gunter
Gastonia, N.C.

James A. Hackney III
Washington, N.C.

Ex officio: Student Body Pres.
Gary V. Mauney
4130 Univ. Student Ctr.

Jack P. Jordan
Mt. Gilead, N.C.

Elizabeth B. Lee
Lumberton, N.C.

Clarence Lightner
Raleigh, N.C.

Gerald H. Long
Winston-Salem, N.C.

Edward I. Weisiger
Charlotte, N.C.

T. Baxter Williams Jr.
Currituck, N.C.

Asst. Secretary
William H. Simpson
A Holladay Hall-737-2200

SCHOOLS, DEPARTMENTS, DIVISIONS AND OFFICES

A

Office	Head	Address	Phone
Academic Skills Program			
Director	Hugh Fuller	300-D Poe, Box 7105	3037
Asst. Dir.	Thomas Conway	124 Reynolds Coliseum, Box 7104	2464
Coord., Acad. Advancement	Margaret Gransee	100 Reynolds Coliseum, Box 7104	7053
Coord., Acad. Support Serv.	Ann Mann	528-A Poe, Box 7105	3163
Coord., Univ. Undesignated	Joan Mills	528 Poe, Box 7105	3592
Accounting, Academic Programs	C. J. Messere	201-F Patterson, Box 8109 ..	3273
Accounting Office			
Director	Ernest G. Murphrey	201 Admn. Serv. Ctr., Box 7205	3824
Asst. Dir., General Accounting	James C. Langfahl	205 Admn. Serv. Ctr. Box 7205	3823
Mgr., Accounts Payable	Deborah P. Lane	206 Admn. Serv. Ctr., Box 7204	2158
Mgr., Fund Accounting	Lou F. Rosendahl	211 Admn. Serv. Ctr., Box 7203	2149
Supv., Capital Assets			
Accounting	John C. Hubbard	202 Admn. Serv. Ctr., Box 7205	2148
Supv., Spec. Accounting Serv.			
Billy R. Bunn		204 Admn. Serv. Ctr., Box 7205	2148
Supv., Travel Audit			
Tassie Brooks		213 Admn. Serv. Ctr., Box 7204	3152
Administrative Computing Services			
Director	H. Leo Buckmaster	B-21 Hillsborough Bldg., Box 7209	2794
Admn. Asst.	Doratha Moore	B-21 Hillsborough Bldg., Box 7209	2794
Mgr., Fin. and Bus. Unit	Bryant Deaton	1212 Blue Ridge Rd., Box 7227	3640
Mgr., Contract Serv. Unit		Leazar Lower Level, Box 7209	3541
Mgr., Data Base	Ronald Melbourne	B-21 Hillsborough Bldg., Box 7209	2794
Mgr., Data Processing	Dennis Norris	11 Peele, Box 7208	2459
Mgr., Info. Ctr.	Jeff N. Hunter	14 Peele, Box 7208	3110
Mgr., Stu. Aff. Unit	Allen Brady	B-21 Hillsborough Bldg., Box 7209	2794
Mgr., Systems	John Hamlet	B-21 Hillsborough Bldg., Box 7209	2794
Admissions			
Dean	Anna P. Keller	112 Peele, Box 7103	2437
Assoc. Dir.	George R. Dixon	112 Peele, Box 7103	2437
Asst. Dir.	Thomas H. Griffin	112 Peele, Box 7103	2437
Asst. Dir.	Rhonda W. Huffman	112 Peele, Box 7103	2437
Asst. Dir.	Kay P. Leager	107 Peele, Box 7103	2437
Asst. Dir.	Sotello V. Long	105 Peele, Box 7103	2437
Adult and Community College Education			
Head	E. J. Boone	117 Ricks, Box 7607	2707
Affirmative Action Officer & Compliance			
Officer for Title IX	Lawrence M. Clark	201 Holladay, Box 7101	3148
Agricultural Communications			
Head	D. M. Jenkins	118 Ricks, Box 7603 ...	2800, 2804
Educational Media Center		2317 Library, Box 7603	3971
Press, Radio, TV		314 Ricks, Box 7603	3173

Office	Head	Address	Phone
Publications		318 Ricks, Box 7603	3173
Service Section		G-5 Ricks, Box 7603	2791
Visual Communications		G-1 Ricks, Box 7603	2861
Agricultural Economics, Economics & Business			
Agri'l. Res. & Coord. of Advising	R. K. Perrin	220-C Patterson, Box 8109 ..	2607
Extension	C. L. Moore	212 Patterson, Box 8109	3107
Grad. Prog. Coord.	M. B. McElroy	214 Patterson, Box 8109	2607
Agricultural Education; Occupational Education			
Coordinator	L. R. Jewell	602-M Poe, Box 7801	2234
Agricultural Institute			
Director	H. Bradford Craig	107 Patterson, Box 7601	3248
Agricultural Research Service		100-B Patterson, Box 7601 ..	2718
Agriculture and Life Sciences, School of			
Dean	D. F. Bateman	112 Patterson, Box 7601	2668, 2641
Business Officer	R. W. Gay Jr.	120 Patterson, Box 7601	2710
Academic Affairs			
Assoc. Dean & Dir.	E. W. Glazener	115 Patterson, Box 7601	2614, 2615
Assoc. Dir.	H. Bradford Craig	107 Patterson, Box 7601	3248
Acad. Adv. & Placement	Martha W. Moore	111 Patterson, Box 7601	3249
Agricultural Extension Service			
Assoc. Dean & Dir.	C. D. Black	104 Ricks, Box 7602	2811
Assoc. Dir.	R. C. Wells	109 Ricks, Box 7602	2812
Asst. Dir., Agri. & Spec. Prog.	J. A. Phillips	211 Ricks, Box 7602	3252
Acting Asst. Dir.,			
Comm. & Rural Dev.	Vance E. Hamilton	302 Ricks, Box 7602	3467
Asst. Dir., County Operations	P. E. Dew	108 Ricks, Box 7602	2813
Asst. Dir., 4-H & Youth Dev.	D. R. Proctor	201 Ricks, Box 7606	2801, 3242
Asst. Dir., Home Econ.	Martha R. Johnson	107 Ricks, Box 7605	2781
Asst. Dir., Training	E. J. Boone	117 Ricks, Box 7607	2707
Ext. Personnel Dev. Spec.	Susan Y. Lyday	109 Ricks, Box 7602	2814
Agricultural Research Service			
Assoc. Dean & Dir.	D. F. Bateman	100-C Patterson, Box 7601 ..	2718
Assoc. Dir., Intl. Prog.	J. L. Apple	209 Daniels, Box 7112	2665, 3201
Assoc. Dir.	George J. Kriz	100-A Patterson, Box 7601 ..	2719
Asst. Dir.	R. E. Cook	100-D Patterson, Box 7601 ..	2718
Asst. Dir.	L. C. Saylor	2028 Biltmore, Box 8001	2883, 2884
Asst. Dir.	W. H. Johnson	100-B Patterson, Box 7601 ..	2717
Asst. Dir.	C. E. Stevens	4700 Hillsborough St., Box 8401	829-4213
Agromeck			
Editor		3123 Univ. Stu. Ctr., Box 8606	2409
Air Force ROTC	Col. Cleveland Simpson	145 Reynolds Coliseum, Box 7308	2417
Alumni Relations			
Director	Bryce R. Younts	Alumni Bldg., Box 7503	3375
Assoc. Dir.	Douglas B. Featherstone	Alumni Bldg., Box 7503	3375
Asst. Dir.	B. Bryant Allen	Alumni Bldg., Box 7503	3375
Editor	Elizabeth Coffey	Alumni Bldg., Box 7503	3375
Animal Science			
Head	C. A. Lassiter	123 Polk, Box 7621	2755, 2756
Accounting	Becky Stephenson	122 Polk, Box 7621	3532
Animal-Forage Metabolism Complex		Trenton Rd.	851-1803
Dairy Records Proc. Ctr.		Leazar, Box 7623	2632
Ext. Animal Husbandry	R. G. Crickenberger	117 Polk, Box 7621	2761
Ext. Dairy Husbandry	F. N. Knott	102 Polk, Box 7621	2771
Ext. Swine Husbandry	J. R. Jones	201 Polk, Box 7621	2566
Grinnells Animal Health Lab		Western Blvd., Box 7626	3319, 2019
Reproductive Physiology Research Lab.		1400 Blue Ridge Blvd.	2673, 3849

Office	Head	Address	Phone
Teaching Coordinator	J. C. Cornwell	211 Polk, Box 7621	2763
Arboretum	J. C. Raulston	Beryl Rd., Box 7609	3132
Architecture			
Head	Robert P. Burns	222 Brooks, Box 7701	2204, 2205, 2206
Asst. Head	Linda W. Sanders	221 Brooks, Box 7701	2204, 2205, 2206
Archives	Maurice S. Toler	G-111 Library, Box 7111	2273
Army ROTC	LTC Howard K. Fisher Jr.	160 Reynolds Coliseum, Box 7309	2428
Art			
Curator	Charlotte V. Brown	4110 Univ. Stu. Ctr., Box 7306	3503
Athletics			
Director	James T. Valvano	Case Athl. Center, Box 8501	2109
Senior Assoc. Dir.	Frank Weedon	Case Athl. Center, Box 8501	2560
Assoc. Dir.	Nora Lynn Finch	Case Athl. Center, Box 8501	2555
Assoc. Dir.	Kevin O'Connell	Case Athl. Center, Box 8501	3045
Asst. Dir.	Howard Hink	Case Athl. Center, Box 8501	3382
Asst. Dir.	Robert A. Robinson	Case Athl. Center, Box 8501	3315
Asst. Dir.	Ray Tanner	Case Athl. Center, Box 8501	2101
Box Office Mgr.	Bessie Steele	103 Reynolds Coliseum, Box 8503	2106
Business Mgr.	Richard Farrell	103 Reynolds Coliseum, Box 8503	3475
Coliseum Engineer	Bobby Stocks	106 Reynolds Coliseum, Box 8501	2108
Equipment Manager	David Vaughn	Weisiger-Brown Athl. Fac., Box 8502	3956
Head Trainer	Jim Rehbock	Weisiger-Brown Athl. Fac., Box 8502	3960
Sports Information Dir.	Ed Seaman	Case Athl. Center, Box 8501	2102
Wolfpack Club Dir.	Charlie Bryant	College Inn, Box 8602	2112
Baseball	Sam Esposito	Case Athl. Center, Box 8501	3612
Basketball, Men's	James T. Valvano	Case Athl. Center, Box 8501	2104
Basketball, Women's	Kay Yow	Case Athl. Center, Box 8501	2880
Cross Country, Men's & Women's ...	Rollie Geiger	Weisiger-Brown Athl. Fac., Box 8502	3959
Fencing, Men's & Women's	David Porter	Case Athl. Center, Box 8501	2101
Football	Dick Sheridan	Weisiger-Brown Athl. Fac., Box 8502	2114
Golf, Men's	Richard Sykes	Case Athl. Ctr., Box 8501 ..	3317
Gymnastics, Women's	Mark Stevenson	Case Athl. Center, Box 8501	2938
Rifle, Men's & Women's	John Reynolds	(after 5:00 p.m.)	872-0544
Soccer, Men's	George Tarantini	Case Athl. Center, Box 8501	3476
Soccer, Women's, & Coordinator of Soccer	Larry Gross	Case Athl. Center, Box 8501	3476
Swimming, Men's & Women's ...	Don Easterling	Case Athl. Center, Box 8501	2849
Tennis, Men's & Women's	Crawford Henry	122 Reynolds Coliseum, Box 8501	2493

Office	Head	Address	Phone
Track, Men's & Women's	Rollie Geiger	Weisiger-Brown Athl. Fac., Box 8502	3959
Volleyball	Judy Martino	Case Athl. Ctr., Box 8501	3826
Wrestling	Bob Guzzo	Weisiger-Brown Athl. Fac., Box 8502	3548
Audit Div. (Internal), Mgr.	Preston Bethea	B Holladay, Box 7202	3289

B

Biochemistry			
Head	Samuel B. Tove	126 Polk, Box 7622	2581
Biological and Agricultural Engineering			
Head	F. J. Hassler	100 Weaver, Box 7625	2694
Ext. Bio. & Agri'l. Engr.	Frank J. Humenik	200 Weaver, Box 7625	2675
Biological Sciences Interdepartmental			
Teaching Program Coordinator	C. F. Lytle	2717-A Bostian, Box 7611 ...	3341
Biomathematics Graduate Program (See Statistics)			
Biotechnology Program, NCSU			
Director	Philip B. Carter	1 Holladay, Box 7003	7876
Botany			
Head	E. D. Seneca	2214 Gardner, Box 7612	2727
Grad. Administrator	Tommy E. Wynn	2717-B Bostian, Box 7612 ...	3341
Herbarium	James Hardin	3207 Gardner, Box 7612	2700
Budgets			
Director	Roy L. Holley	206 Holladay, Box 7206	2175
Building Services		3 Park Shops, Box 7219	3323

C

Campus Planning and Construction			
Director/Univ. Architect	Edwin F. Harris Jr.	219 Oberlin Rd., Box 7216 ..	2121
Univ. Construction Mgr.	John G. Fields	219 Oberlin Rd., Box 7216 ..	2121
Univ. Landscape Architect	Sallie Ricks	219 Oberlin Rd., Box 7216 ..	2121
Consulting Architect	W. Huntley McKinnon	219 Oberlin Rd., Box 7216 ..	2121
Consulting Architect	Michael L. Rickenbaker	219 Oberlin Rd., Box 7216 ..	2121
Admn. Asst.	Betty Z. Dunn	219 Oberlin Rd., Box 7216 ..	2121
Capital Assets Accounting Supv.	John G. Hubbard	202 Admn. Serv. Ctr., Box 7205	2148
Career Planning and Placement Center			
Director	Walter B. Jones	28 Dabney, Box 7303	2396
Carter-Finley Stadium .....		.....	2215, 2218
Center, Res. in Sci. Computation	C. D. Meyer	242 Harrelson, Box 8205	2384
Central Stores			
Store Manager	Judy Willis	Central Stores, Box 7225	2197
Sales	Marvin Gibbs	Central Stores, Box 7225	2230
Business Office	Joyce Stephens	Central Stores, Box 7225	2197
Central Receiving	Ray Lawhorn	Central Stores, Box 7225	2211
Gas Cylinder Mgmt.	Sherwood Pendergraph	Central Stores, Box 7225	2211
Surplus Property	Jessie Williams	Central Stores, Box 7225	2211
Chancellor's Office			
Chancellor	Bruce R. Poulton	A Holladay, Box 7001	2191, 2192
Univ. Counsel		A Holladay, Box 7001	2319
Sec. of the Univ.	William H. Simpson	A Holladay, Box 7001	2200
Exec. Asst. to the Chancellor	Karen R. Peterson	A Holladay, Box 7001	3062
Admn. Asst.	Thomasene F. Bennett	A Holladay, Box 7001	2191
Director, Institutional			
Research	Richard D. Howard	202 Peele, Box 7002	2776
Chemical Engineering			

Office	Head	Address	Phone
Head	H. B. Hopfenberg	113 Riddick, Box 7905	2324
Grad. Admin.	R. M. Felder	316 Riddick, Box 7905	3571
Undergrad. Admin.	D. B. Marsland	106 Riddick, Box 7905	2325
Chemistry			
Head	Kenneth W. Hanck	208-A Dabney, Box 8204	2545
Asst. Head, Facilities & Business Affairs	Marion Miles	525 Dabney, Box 8204	2941
Asst. Head, Graduate Studies	Charles G. Moreland	109 Dabney, Box 8204	2548
Asst. Head, Undergrad. Studies	William P. Tucker	108-A Dabney, Box 8204	2546
Supply Room	Curtis G. Harris	314 Dabney, Box 8204	2547
Civil Engineering			
Head	Paul Zia	208 Mann, Box 7908	2352
Assoc. Head, Grad. Prog.	Harvey E. Wahls	201 Mann, Box 7908	2331
Assoc. Head, Undergrad. Prog.	Clinton L. Heimbach	211 Mann, Box 7908	2331
Ctr. for Transportation Engr. Studies	Paul Zia	208 Mann, Box 7908	2331
Climatologist, Office of the State Coliseum, Reynolds		123 Kilgore, Box 7609	3056
Director	James T. Valvano	Case Athl. Center, Box 8501	2109
Box Office Mgr.	Bessie Steele	103 Reynolds Coliseum, Box 8503	2106
Concessions Dir., Univ. Dining		119 Reynolds Coliseum, Box 7218	2123
Computer Graphics Center			
Director	Siamak Khorram	338 Daniels, Box 7106	3430
Computer Science			
Dept. Office		122 Daniels, Box 8206	2858
Head	Robert E. Funderlic	122-C Daniels, Box 8206	7825
Assoc. Head	Thomas L. Honeycutt	122-D Daniels, Box 8206	7001
Asst. Head	Joyce Hatch	120 Daniels, Box 8206	7027
Equip. & Software	Donald C. Martin	121 Daniels, Box 8206	7944
Grad. Admin.	David F. McAllister	122-B Daniels, Box 8206	7971
Leazar Computing Facility		Lower Level, Leazar, Box 8206	3909
Computer Studies (Grad. Prog.)			
Director	Wushow Chou	318 Daniels, Box 8207	2654
Assoc. Director	David F. McAllister	122 Daniels, Box 8207	7971
Computing Center			
Director	Carl W. Malstrom	M-2 Hillsborough Bldg., Box 7109	2517
Asst. Dir.	J. Carl Allred	110 Hillsborough Bldg., Box 7109	2517
Administrative Serv.	Betty Strickland	M-2 Hillsborough Bldg., Box 7109	2517
Business Serv.	Bonnie Hine	B16-B Hillsborough Bldg., Box 7109	2517
Communications & Hardware Serv. ...	Sam Averitt	109-A Hillsborough Bldg., Box 7109	2517
Operations	George Stancil	107 Hillsborough Bldg., Box 7109	2517
Systems	Larry Roberson	B-15 Hillsborough Bldg., Box 7109	2517
User Serv.	W. Darrell Myrick	1304 Library, Box 7109	2517
Consulting		106 Hillsborough Bldg., Box 7109	3035
Dispatching		126 Hillsborough Bldg., Box 7109	2523
General Info.		M-2 Hillsborough Bldg., Box 7109	2517
Burlington Res. Terminal		1132 Burlington Lab, Box 7109	3165

Office	Head	Address	Phone
Daniels Terminal		118 Daniels, Box 7109	3631
Computing Center, Triangle Universities (TUCC) (See Center)		Triangle Universities Computation	
Computing Facility, Educ.		424 Poe, Box 7801	2681
Continuing Education, Division of (See Lifelong Education, Division for)			
Contracts and Grants			
Director	Earl N. Pulliam	3 Leazar Lower Level, Box 7214	2153
Asst. Dir.	Dewey B. Durham, Jr.	3 Leazar Lower Level, Box 7214	2153
Cooperating Raleigh Colleges			
Director	Rosalie P. Gates	Johnson Hall Meredith College, Raleigh	833-6461
Cooperative Campus Ministry			
Assemblies of God	Raymond Sowell	P.O. Box 588	755-0928
Baptist	Ted Purcell	Baptist Stu. Ctr.,	834-1875
Catholic	Father Joe McNamara	1200 Univ. Stu. Ctr., Box 7306	2414
Episcopal	Bill Brettmann	1200 Univ. Stu. Ctr., Box 7306	2414
Inter-Varsity	Eddie Sartin	702-C Smithdale Rd.	859-0922
Jewish	Rabbi Martin Beifield	5315 Creedmoor Rd.	781-4895
Lutheran	Beverly Alexander	27612	
Methodist	Bill Sharpe	2723 Clark Ave.	828-1433
Metropolitan Community Church	June Norris	2501 Clark Ave.	833-1861
Moravian	Craig Troutman	1200 Univ. Stu. Ctr., Box 7306	2414
Presbyterian	W. W. Olney Gail Phares	3225 Darien	787-4034
United Student Fellowship	Shelton Murphy	27 Horne St.	834-5184
Cooperative Education		3212-D Calumet Dr.	821-1608
Director	William D. Weston		
Cooperative Sports Fishery Research		M5 Link, Box 7110	2199
Leader	M. T. Huish		
Counseling Center		4105 Gardner, Box 7617	2631
Director	M. Lee Salter		
Asst. Dir., Counseling	Michael E. Bachman	200 Harris, Box 7312	2423
Counselor Educ.		200 Harris, Box 7312	2423
Head	Norman A. Sprinthall		
Craft Center	Conrad W. Weiser	520 Poe, Box 7801	2244
Creamery	John J. Miles	Thompson Bldg., Box 7305	2457
Credit Union, State Employees'		12 Schaub, Box 7624	2760
Branch Manager	Brent Melton		
Crop Improvement Association		2802 Hillsborough St., Box 8609	2686
Director	Foil W. McLaughlin		
Crop Science		3709 Hillsborough St., Box 8604	2851
Head	Billy E. Caldwell		
Teaching Coord., Grad. and Undergrad. Programs	D. A. Emery	2207 Williams, Box 7620	2647, 2648
In Charge, Ext. Crop Science	W. K. Collins	2210 Williams, Box 7620	3666, 3667
Curriculum and Instruction Education		2212 Williams, Box 7620	2653
Head	P. H. Martorella		
Diagnostic Teaching Clinic		402-S Poe, Box 7801	3221
Coord.	Wendy Sanchez		
		602-D Poe, Box 7801	7061

Office	Head	Address	Phone
D			
Dairy (See Animal Science and Food Science)			
Dairy Plant	John J. Miles	12 Schaub, Box 7624	2760
Design			
Head	Charles E. Joyner	220-B Brooks, Box 7701	2201, 2202, 2208
Design Library			
Librarian	Caroline Carlton	209 Brooks, Box 7701	2207
Design, School of			
Dean	Claude E. McKinney	200-A Brooks, Box 7701	2201, 2202, 2208
Assoc. Dean	Robert P. Burns	222 Brooks, Box 7701	2204, 2205, 2206
Asst. Dean	Charles E. Joyner	200-B Brooks, Box 7701	2201, 2202, 2208
Environ. Simulation Lab	Kenneth Pittman	203 Brooks, Box 7701	3160
Media Center	William K. Bayley	125 Brooks, Box 7701	3785
Shop	Terry E. Frye	117 Brooks, Box 7701	2204
Development			
Vice Chancellor	John T. Kanipe Jr.	12 Holladay, Box 7501	2846
Exec. Asst. to the Vice Chancellor	Dennis A. Taylor	12 Holladay, Box 7501	2846
Univ. Dev. Officer—Arts		Univ. Stu. Ctr., Box 7306 ..	2452
Univ. Dev. Officer—Deferred Giving	Joseph O. Bull	20 Enterprise St., Box 7501	2034, 2035
Univ. Dev. Officer—Design, SHASS		7 Holladay, Box 7502	3700
Univ. Dev. Officer—Education	M. Lynn Lyle	732 Poe, Box 7801	7017
Univ. Dev. Officer— Engineering	James R. Pearson	102 Page, Box 7901	7458
Univ. Dev. Officer—Forest Resources		1 Holladay, Box 7502	3700
Univ. Dev. Officer—PAMS	Cynthia J. Ball	20 Enterprise St., Box 7501	2034, 2035
Univ. Dev. Officer—Records & Research	Julia G. May	2 Holladay, Box 7502	7827
Univ. Dev. Officer—SALS		12 Holladay, Box 7502	2846
Univ. Dev. Officer—SVM		1 Holladay, Box 7502	3700
Dormitories (See Residence Halls)			
Duplicating Facility, Educ.	Margaret Gray	120 Poe, Box 7801	2231

E

Ecology Committee			
Chairman	A. G. Wollum	3131 Williams, Box 7619	2389
Economics & Business			
Head	D. M. Hoover	201 Patterson, Box 8109	3273
Assoc. Head, Accounting	C. J. Messere	201-F Patterson, Box 8109 ..	3273
Assoc. Head, Agri'l. Res. & Teaching	R. K. Perrin	216 Patterson, Box 8109	2607
Assoc. Head, Econ. & Bus.	J. S. Lapp	201-D Patterson, Box 8109 ..	3273
Assoc. Head & Ext. Specialist-in-Charge	C. L. Moore	212 Patterson, Box 8109	3107
Asst. Head, Graduate Programs	M. B. McElroy	214 Patterson, Box 8109	2607
Asst. to Head		201 Patterson, Box 8109	3273
Advisor/Counselor	Bobby Lee Puryear	204 Patterson, Box 8109	3273
Counselor/Placement	Carol G. Schroeder	204 Patterson, Box 8109	3273
Economic and Business Studies, Center for			
Director	E. W. Erickson	220 Hillsborough Bldg., Box 8110	3893
Education, School of			
Dean	Carl J. Dolce	208 Poe, Box 7801	2231

Office	Head	Address	Phone
Assoc. Dean	H. A. Exum	208 Poe, Box 7801	2231
Assoc. Dean	Robert T. Williams	208 Poe, Box 7801	2231
Dir., Information Systems Group	William L. Ballenger	424 Poe, Box 7801	2681
Research and Extension Services	Carl J. Dolce	608 Poe, Box 7801	3127
Curriculum Materials Ctr. Coord.	Margaret A. Link	400 Poe, Box 7801	3191
Instructional Materials Production Ctr. (IMPC) Coord.	W. S. Burke	511 Poe, Box 7801	3054
Education Foundation Inc.	M. Lynn Lyle	732 Poe, Box 7801	7017
Educational Leadership & Prog. Eval.	Raymond G. Taylor	608P Poe, Box 7801	3127
Electrical and Computer Engineering Head	N. A. Masnari	232 Daniels, Box 7911	2336
Assoc. Head, Undergrad. Admin.	W. T. Easter	232 Daniels, Box 7911	2336
Graduate Admin.	J. F. Kauffman	238 Daniels, Box 7911	2336
Coord., Advising	J. Larson	233 Daniels, Box 7911	2336
Dir., Ctr. for Communications & Signal Processing	S. Chitsaz	320 Daniels, Box 7914	3015
Electron Microscopy Center	J. M. Mackenzie Jr.	1223 Gardner, Box 7615	2664
Engineering Operations Program Director	F. M. Richardson	116 Page, Box 7901	3683
Engineering Research Services Division Director	T. S. Elleman	224 Page, Box 7903	2345
Engineering, School of Dean	Larry K. Monteith	102 Page, Box 7901	2312
Assoc. Dean, Graduate Programs	J. K. Ferrell	224 Page, Box 7901	2345
Assoc. Dean, Research Programs	T. S. Elleman	224 Page, Box 7903	2345
Assoc. Dean, Undergrad. Programs	George F. Bland	116 Page, Box 7904	3693
Dir., Academic Affairs	Hubert Winston	115 Page, Box 7901	2315
Dir., Admin. Services	Jemma S. Rayfield	101 Page, Box 7901	2310
Dir., Admissions & Transfers ...	Robert M. Turner	115 Page, Box 7901	3263
Dir., Minority Student Services	Bobby Pettis	116 Page, Box 7904	3264
Dir., Special Programs	Byard Houck	115 Page, Box 7904	2341
Communications	Mary Yionoulis	6 Page, Box 7901	3848
Co-operative Education	William L. Holloman	115 Page, Box 7904	2300
Publications	Martha K. Brinson	7 Page, Box 7901	2310
Tutelage Program	Byard Houck	117 Page, Box 7904	2341
Writing Assistance Program	Gary Blank	118 Page, Box 7901	3545
(For engineering departments, look under individual listing: Biological and Agricultural, Chemical, Civil, Electrical and Computer, Industrial, Materials, Mechanical and Aerospace, and Nuclear.)			
English Dept. Office		Tompkins, Box 8105	3866
Head	John E. Bassett	131-B Tompkins, Box 8105	2462
Assoc. Head and Dir., Undergrad. Prog.	Jack D. Durant	131-G Tompkins, Box 8105	3353
Asst. Head, Scheduling	Marilyn M. Brandt	131-F Tompkins, Box 8105	3353
Dir., Freshman Prog.	Barbara J. Baines	248 Tompkins, Box 8105	3870
Dir., Graduate Prog.	Mary C. Williams	131-E Tompkins, Box 8105	3353
English Education	Ruie Pritchard	408 Poe, Box 7801	3221
Entomology Head	Ronald J. Kuhr	2301 Gardner, Box 7613	2746
Ext. Entomology	P. Sterling Southern	2309 Gardner, Box 7613	2703, 2831
Environmental Projects	David Adams	139 Harrelson, Box 7107	2470, 2891
Extension Vice Chancellor for Extension & Public Service	W. L. Turner	200 McKimmon, Box 7401 ..	2144

Office	Head	Address	Phone
Assoc. Vice Chan. & Dir., Ctr. for Urban Affairs	Grover J. Andrews	217 McKimmon, Box 7401 ..	3373
Asst. to Vice Chan.	Mary Frances Hester	204-A McKimmon, Box 7401	3373

F

Faculty Club Manager	Harry E. Anderson	4200 Hillsborough St., 27606, Box 8611	828-0308
Faculty Senate Chairman	James E. Smallwood	2319 Library, Box 7111	2279
Fellows Program, North Carolina State	Gerald G. Hawkins	210 Harris, Box 7316	3151
Fiber and Polymer Science Program	William K. Walsh	107-B Nelson, Box 8301	3057
Film Library, Agricultural Extension		Ricks Annex, Box 7603	2861
Finance and Business Vice Chancellor, Fin. and Bus.	George Worsley	B Holladay, Box 7201	2155
Assoc. Vice Chancellor, Fin. and Bus.	Lauren J. Brisky	B Holladay, Box 7201	2732
Asst. Vice Chancellor, Bus.	Charles D. Leffler	203 Holladay, Box 7228	2146, 2147
Asst. Vice Chancellor, Fin.	Darryl W. Bierly	B Holladay, Box 7201	2143
Financial Aid Director	Carl O. Eycke	213 Peele, Box 7302	2421, 2448
Assoc. Dir.	Paul D. West Jr.	213 Peele, Box 7302	2421, 2448
Asst. Dir.	Wanda Abdullah	213 Peele, Box 7302	2421, 2448
Asst. Dir.	Elizabeth V. McDuffie	213 Peele, Box 7302	2421, 2448
Asst. Dir.	Florence I. Francis	213 Peele, Box 7302	2421, 2448
Asst. Dir.	Rosa Hinton	213 Peele, Box 7302	2421, 2448
Asst. Dir., Scholarship Coord.	Patricia J. Lee	205 Peele, Box 7302	3671
Asst. Dir.	Marjorie Potterton	213 Peele, Box 7302	2421, 2448
Asst. Dir.	Mary F. Usry	213 Peele, Box 7302	2421, 2448
Food Science Head	D. R. Lineback	100-C Schaub, Box 7624	2951
Teaching Coord., Grad. & Undergrad. Programs	V. A. Jones	100-D Schaub, Box 7624	2952
In Charge, Ext. Food Science	N. C. Miller Jr.	129-B Schaub, Box 7624	2956
Creamery	John J. Miles	12 Schaub, Box 7624	2760
Foreign Languages and Literatures Dept. Office		120 1911 Bldg., Box 8106 ..	2475
Head	Joan H. Stewart	122 1911 Bldg., Box 8106 ..	3343
Asst. Head	Lina Cofresi	126 1911 Bldg., Box 8106 ..	2475
Scheduling Officer	Gilbert Smith	129 1911 Bldg., Box 8106 ..	2475
Language Lab.	Edward M. Stack	302 Harrelson, Box 8106	3358
Teacher Educ.	Arlene Malinowski	113 1911 Bldg., Box 8106 ..	2475
Spanish/Business Prog.	Ruth Adler	131 1911 Bldg., Box 8106 ..	2475
Language Festival	Gilbert Smith	119 1911 Bldg., Box 8106 ..	2475
ESL Prog.	Virginia Prichard	304 Harrelson, Box 8106	3297
Forest Resources Library	John Abbott	4012 Biltmore, Box 8001	3513
Forest Resources, School of Dean	Eric L. Ellwood	2028-H Biltmore, Box 8001	2883, 2884
Assoc. Dean, Acad. Aff.	LeRoy C. Saylor	2028-C Biltmore, Box 8001	2883
Assoc. Dean, Research	E. B. Cowling	2028-F Biltmore, Box 8001	2883
Forestry Extension, In Charge	Michael P. Levi	3036-D Biltmore, Box 8003	3386, 3387
Forestry Head	Arthur W. Cooper	2018-E Biltmore, Box 8002	2892

Office	Head	Address	Phone
Foundation Seed Producers, Inc.			
Manager	M. W. Baker	4025 Beryl Rd., Box 8603 ...	2821
Foundations Accounting & Investments			
Director	Paulette E. Jervay	B Holladay, Box 7207	2110
Fraternalities-Interfraternity Council			
President	Alan Patermoster	214 Harris, Box 7314	2441
Alpha Gamma Rho	Al Collier	2304 Hillsborough St. ...	821-7410
		27607	
Alpha Phi Alpha	Dennis Hatchett	1402 Varsity Dr.	839-1657
		27606	
Alpha Sigma Phi	Randy Bass	10 Enterprise St.	828-5025
		27607	
Delta Sigma Phi	John Israel	Box 5566, 27607	779-6245
Delta Upsilon	Tony Copra	3 Maiden Ln., 27607 ...	834-9255
Farm House	Barry Honeycutt	115 Park Ave., 27605 ...	832-0886
Kappa Alpha	Jim Whitehurst	2601 W. Fraternity	
		Ct. 27606	833-4271
Kappa Alpha Psi	Ronald Byrd	214 Harris	2441
Kappa Sigma	Kevin Muldowney	2613 W. Fraternity	
		Ct. 27606	832-3812
Lambda Chi Alpha	Fred Boss	108 S. Fraternity Ct. ...	832-5634
		27606	
Omega Psi Phi	Leslie Mercer	214 Harris	2441
Phi Beta Sigma	Barry Blackwell	214 Harris	2441
Phi Kappa Tau	Dick Tharpe	2511 W. Fraternity	
		Ct. 27606	828-7625
Pi Kappa Alpha	Mason Chapman	214 S. Fraternity Ct. ...	828-7641
		27606	
Pi Kappa Phi	Maurice Tyler	2401 W. Fraternity	
		Ct. 27606	755-9996
Sigma Alpha Epsilon	James Ingram	2701 W. Fraternity	
		Ct. 27606	834-3455
Sigma Alpha Mu	David Svendsgaard	2501 W. Fraternity	
		Ct. 27606	828-8153
Sigma Chi	Robert Poetzinger	2409 W. Fraternity	
		Ct. 27606	833-7811
Sigma Nu	Randy Wynne	204 S. Fraternity Ct. ...	832-1172
		27606	
Sigma Phi Epsilon	Tolly Spence	100 S. Fraternity Ct. ...	832-4118
		27606	
Sigma Pi	Rich Adams	Box 5656, Clark Ave. ...	833-5116
		27607	
Tau Kappa Epsilon	John Drake	2619 W. Fraternity	
		Ct. 27606	833-6926
Theta Chi	Richard Curtis	20 Maiden Ln., 27607 ...	834-3585
Theta Tau	Tim Howard	4 Maiden Ln., 27607 ...	828-2730
Freight Office	Ray Lawhorn	Central Stores, Box 7225 ...	2211
Friends of the College	Henry Bowers	Univ. Stu. Ctr.,	
		Box 7306	2835, 2452
Furniture Mfg. & Mgmt.			
In Charge	C. Thomas Culbreth	341 Riddick,	
		Box 7906	3335, 3338

G

Gas Chromatograph/Mass Spectrometer Facility			
Lab Supv.	Carol A. Haney	1141 Burlington,	
		Box 7003	3746
Genetics			
Head	William R. Atchley	3513 Gardner, Box 7614 ...	2292
Graduate School		Box 7102	2871, 2872
Interim Dean	Debra Stewart	103 Peele, Box 7102	2394
Assoc. Dean	R. E. Fornes	203 Peele, Box 7102	7052

Office	Head	Address	Phone
Assoc. Dean		203 Peele, Box 7102	7052
Assoc. Dean	A. M. Witherspoon	108 Peele, Box 7102	7461
Grad. Stu. Assoc.	George Hodge	350 Riddick, Box 7906	2363
Graphic Communications, Occup. Educ.			
Coord.	Garland Hilliard	510-N Poe, Box 7801	2234
Grounds Superintendent	Frank Bynum	Morris Bldg., Box 7219	3401

H

Handicapped Student Services			
Coord.	Patricia Davis	200 Harris, Box 7312	7653
Learning Disabilities Coord.	Lelia Brettmann	200 Harris, Box 7312	7653
Health Occupations, Occup. Educ.			
Coord.	Judith A. Davis	510-C Poe, Box 7801	2234
Health Services (Student)			
Information		Clark Inf., Box 7304 ...	2563, 2564
Director	Jerry Barker	200 Clark Inf., Box 7304 ...	2562
Coord., Health Educ. Progs.	Marianne Turnbull	200 Clark Inf., Box 7304 ...	2563
History			
Head	Alexander J. DeGrand	157 Harrelson, Box 8108 ...	3307
Dept. Office		162 Harrelson, Box 8108 ...	2483
Undergrad. & Grad. Prog.		162 Harrelson, Box 8108 ...	2483
Home Economics Extension	Martha R. Johnson	107 Ricks, Box 7605	2781
Foods and Nutrition	Nadine F. Tope	F-4 Ricks Annex, Box 7605	2770
Human Environment	Judy Mock	F-1 Ricks Annex, Box 7605	2770
Horticultural Science			
Head	A. A. De Hertogh	120 Kilgore, Box 7609	3131
Grad. Program Coord.	F. L. Haynes Jr.	214 Kilgore, Box 7609	3167
Undergrad. Teaching Coord.	W. E. Ballinger	114 Kilgore, Box 7609	3189
Ext. Horticulture		160 Kilgore, Box 7609	3321
Housing and Residence Life			
Director	Cynthia P. Bonner	208 Harris, Box 7315	2406
Assoc. Director	Susan Decker	208 Harris, Box 7315	2406
Assoc. Director	Mark Denke	204 Harris, Box 7315	2410
Asst. Dir., Administration	Toni McNaughton	206 Harris, Box 7315	2410
Asst. Dir., Facilities	Jeff Compher	205 Harris, Box 7315	2410
Asst. Dir., Operations	Cheryl DiBucci	206 Harris, Box 7315	2410
Asst. Dir., Policy Enforcement	Betsy Pawlicki	208 Harris, Box 7315	2406
Asst. Dir., Programming	Audrey Jones	208 Harris, Box 7315	2406
Asst. Dir., Staff Supervision	Michael Gilbert	208 Harris, Box 7315	2406
Student Family Housing	Eli Panee	King Village, Box 7315	2440
Accounting Technician	Jackie Sloan	207 Harris, Box 7315	3837
Off-Campus Housing	Ruth Fuller	201 Harris, Box 7315	3821
Housing Assignments	Norma McDonald	201 Harris, Box 7315	2440
Resid. Hall Keys		206 Harris, Box 7315	2410
Resid. Hall Repairs		205 Harris, Box 7315	2410
Summer Conference Housing		206 Harris, Box 7315	2410
Human Resources			
General Employment Information			2135
General Training Information			7844
Director	Alice R. Miller	Admn. Serv. Ctr., Box 7210	2973
Assoc. Dir., Employment Services	John Brooks	Admn. Serv. Ctr., Box 7210	2135
Assoc. Dir., Pos. Mgmt. & Sal. Admin.	Sam Connally	Admn. Serv. Ctr., Box 7210	7175
Asst. Dir., Training & Development	Susan Babcock	Admn. Serv. Ctr., Box 7210	7844
Mgr., Position Management	Kathy Heeter	Admn. Serv. Ctr., Box 7210	7175

Office	Head	Address	Phone
Mgr., Salary Administration	E. Ann Peters	Admn. Serv. Ctr., Box 7210	7929
Mgr., Univ. Temp. Service	Kathy Pendergraft	Admn. Serv. Ctr., Box 7210	7060
Humanities and Social Sciences, School of			
Dean	William B. Toole III	106 Link Bldg., Box 8101 ...	2467
Assoc. Dean, Academic Affairs	M. Mohan Sawhney	106 Link Bldg., Box 8101 ...	2468
Assoc. Dean, Planning & Management	G. David Garson	M-7 Link Bldg., Box 8101 ...	2468
Asst. Dean, Research & Graduate Prog.	Edith D. Sylla	106 Link Bldg., Box 8101 ...	2467
Asst. to the Dean for Undergrad. Acad. Affairs	W. Curtis Fitzgerald	M-9 Link Bldg., Box 8101 ...	2468
Dir., Hum. Comp. Lab.	G. David Garson	109 Tompkins, Box 8101	7880
Dir., Hum. Ext.	James W. Clark & Joseph P. Mastro	M-4 Link Bldg., Box 8101 ...	3451
Dir., Media Services	Ronald E. Kemp	G-116 Tompkins, Box 8101	3334
Dir., N.C. Japan Center	John Sylvester Jr.	5 Rosemary St., Box 8112 ...	3450
Dir., Social Sci. Res. & Instructional Comp. Lab.	G. David Garson	221 Winston, Box 8101	3791
Acad. Coord., Minority Stu.	Joan S. Griffin	286 Tompkins, Box 8101	7456
Coord., Evening Prog.	Lynda H. Hambourger	G-103C Tompkins, Box 8101	3638
NCSU Software	G. David Garson	M-7 Link Bldg., Box 8101 ...	3067

I

Industrial and Technical Educ. Prog., Occup. Educ.			
Acting Coordinator	J. R. Clary	502-L Poe, Box 7801	2234
Industrial Arts Educ. Prog.			
Coordinator	Richard E. Peterson	300 Poe, Box 7801	2234
Industrial Engineering			
Head	Thom J. Hodgson	328 Riddick, Box 7906	2362
Asst. Head & Coord., Advising	Clarence L. Smith, Jr.	334 Riddick, Box 7906	2362
Grad. Administrator	Richard G. Pearson	349 Riddick, Box 7906	2362, 3086
Furniture Manufacturing and Management Program	C. Thomas Culbreth	341 Riddick, Box 7906	3335
Industrial Extension Service			
Dir., Engr. Ext. Education	Daniel E. Harrell	203-A Page, Box 7902	2356
Dir., Indus. Ext. & App. Res.	Thomas W. Stephenson	215-C Page, Box 7902	3262
Infirmiry (See Health Services)			
Information Center (Student Addresses)		Univ. Stu. Ctr., Box 7306 ...	3138
Information Services (News Service)			
Director	Lucy Coulbourn	219 Oberlin Rd., Box 7504 ..	3470
Asst. Dir., News	Rosalind Reid	219 Oberlin Rd., Box 7504 ..	3470
Asst. Dir., Electronic Media ..	Robert S. Cairns III	219 Oberlin Rd., Box 7504 ..	3470
Information Systems Group (See Education, Sch. of)			
Information, Visitor Parking		Info. Ctr.	3205
Institute of Statistics			
Director	Daniel L. Solomon	110-A Cox, Box 8203	2420
Institutional Research			
Director	Richard D. Howard	202 Peele, Box 7002	2776
Asst. Dir.	Brenda Rogers	202 Peele	2776
International Programs	J. Lawrence Apple	209 Daniels, Box 7112	3201
International Student Office			
International Student Adviser ..	Donald R. Roberts	1201 Univ. Stu. Ctr., Box 7306	2961

Office	Head	Address	Phone
Asst. International Student Adviser	Judith A. Green	1201 Univ. Stu. Ctr., Box 7306	2961
International Trade Center	Thomas R. Brown	213 McKimmon, Box 7401 ..	3793

K

King Village (See Student Family Housing)

L

Laboratory Animal Care Administrator	Ulysses G. Whitworth	225 Polk, Box 7621	2763
Landscape Architecture Head	Arthur L. Sullivan	223 Brooks, Box 7701	2204, 2205, 2206
Laundry and Dry Cleaning Manager	Lawrence W. Gower	Laundry, Box 7218	2122
Library, D. H. Hill Dir. of Libraries	I. T. Littleton	1208 Library, Box 7111	2843, 2595
Asst. Dir., General Serv.	Donald S. Keener	1318 Library, Box 7111	2843, 2595
Asst. Dir., Reference Serv.	William C. Lowe	1128 Library, Box 7111	2935
Asst. Dir., Technical Serv.	Nell Waltner	1137 Library, Box 7111	2841
Binding	Phyllis Garris	G-116 Library, Box 7111	2842
Circulation Desk	Bonnie Baker	1212 Library, Box 7111	3364
Collection Dev.—Acquisitions ...	Margaret R. Hunt	3136 Library, Box 7111	3333
General Services	Linda P. Fuller	1209 Library, Box 7111	3364
Interlibrary Center	Ann Baker Ward	1133 Library, Box 7111	2116
Library Systems	John Ulmschneider	2312 Library, Box 7111	2339
Media Center Office	Pam Fleming	2305 Library, Box 7111	2977
Monographic Cataloging	Walter M. High	1121 Library, Box 7111	2603
Periodicals Serv. Center	Loretta Mershon	G-114 Library, Box 7111	3136
Photocopy	Sharon Wells	1222 Library, Box 7111	2343
Reference-Information	Marta Lange	1131 Library, Box 7111	2935
Reserve Room	Frieda Stamper	1330 Library, Box 7111	2597
Serials	Gloria W. Houser	G-116 Library, Box 7111	2842
Technical Info. Ctr.	M. Ronald Simpson	1129 Library, Box 7111	2830
U. S. Documents	Jean Porter	2108 Library, Box 7111	3280
Lifelong Education, Division for Director, Con. Educ. & Professional Dev.—Admin.	Kelly R. Crump	147-I McKimmon, Box 7401	3007
Assoc. Dir.	Denis S. Jackson	225 McKimmon, Box 7401 ..	2277
Asst. Dir. (Credit Branch)	John F. Cudd Jr.	145-C McKimmon, Box 7401	2265
Asst. Dir., Con. Educ. & Professional Dev.—Prog. Dev.	Rosemary M. Jones	147-H McKimmon, Box 7401	2261
Short Courses & Conferences (Noncredit)		147 McKimmon, Box 7401 ..	2261

M

Mail Room		Leazar	3974
Marine, Earth and Atmospheric Sciences Acting Head	Dr. Henry S. Brown	216 Withers, Box 8208	3717
Grad. Admin.	G. S. Janowitz	228-G Withers, Box 8208	7837

Office	Head	Address	Phone
Undergrad. Admin.	E. F. Stoddard	110B Withers, Box 8208	7939
Atmospheric Sciences		214 Withers, Box 8208	3711
Earth Sciences		214 Withers, Box 8208	3711
Marine Sciences		214 Withers, Box 8208	3711
Marriage Counseling			
Counselors	Cranor F. Graves, Molly H. Glander	200 Harris, Box 7312	2423
Married Student Housing (See Student Family Housing)			
Materials Engineering			
Head	John J. Hren	229 Riddick, Box 7907	3568
Materials Research Center			
Director	Robert F. Davis	141-A Riddick, Box 7907	3272
Mathematics			
Head	E. E. Burniston	360-A Harrelson, Box 8205	3798
Assoc. Head	J. B. Wilson	252 Harrelson, Box 8205	2382, 2383
Dir., Grad. Prog.	J. E. Franke	203 Harrelson, Box 8205	2382, 2383
Dir., Undergrad. Prog.	M. J. Evans	202 Harrelson, Box 8205	2382, 2383
Assoc. Dir., Grad. Prog.	G. D. Faulkner	225 Harrelson, Box 8205	3261
Audio-Visual Tutorial Center		244 Harrelson, Box 8205	3157
Director	R. G. Savage	235 Harrelson, Box 8205	3157
Scheduling Officer	J. A. Marlin	306 Harrelson, Box 8205	3796
Mathematics and Science Education			
Head	Ann C. Howe	326-S Poe, Box 7801	2239
Center for Research in			
Mathematics & Sci. Educ.		326 Poe, Box 7801	2239
McKimmon Center			
Director	Denis S. Jackson	225 McKimmon, Box 7401 ..	2277
Assoc. Director	Mary Frances Hester	202 McKimmon, Box 7401 ..	2277
Reservationist	Diane Outlaw	225 McKimmon, Box 7401 ..	2277
Facilities Coord.	Jane E. Hodge	139 McKimmon, Box 7401 ..	2277
Mechanical and Aerospace Engineering			
Head	John A. Bailey	3211 Broughton, Box 7910	2365, 2366
Grad. Admin.	J. C. Mulligan	3175 Broughton, Box 7910 ..	2365
Undergrad. Admin.	A. S. Boyers	3179A Broughton, Box 7910	2365
Dir., Applied Energy Research			
Lab.	J. A. Edwards	Ligon St., Box 7910	3912
Dir., Ctr. for Sound and Vib.	R. F. Keltie	2229 Broughton, Box 7910 ..	3024
Dir., Integrated Manufacturing			
Systems Engr. Inst.	C. F. Zorowski	2332 Broughton, Box 7915 ..	3808
Dir., Precision Engr. Lab.	T. A. Dow	4216 Broughton, Box 7910 ..	3024
Mentor Program			
Coord.	Endia Hall	211 Harris, Box 7314	3835
Merit Awards Program			
Coordinator	Patricia J. Lee	205 Peele, Box 7302	3671
Microbiology			
Head	L. W. Parks	4515-B Gardner, Box 7615 ..	2391
Biological Nitrogen Fixation Prog.	G. H. Elkan	Method Rd., Box 7615	3281
Center for Electron			
Microscopy	J. M. Mackenzie Jr.	1233 Gardner, Box 7615	2664
Graduate Administrator	T. Melton	4609 Gardner, Box 7615	7136
Undergrad. Coord.	G. H. Luginbuhl	4602 Gardner, Box 7615	7484
Middle School Education Program	John Arnold	402 Poe, Box 7801	3221
Military Property Custodian	Linda Evans	145 Reynolds Coliseum, Box 7308	2427
Motor Pool	Gayle Franks	Motor Pool Bldg., Box 7219	2179
Music			
Director	J. Perry Watson	203 Price Music Ctr., Box 7311	2981

Office	Head	Address	Phone
Mycotoxin Lab	W. M. Hagler Jr.	Univ. Res. Farm #6, Varsity Dr., Box 7608	2729, 3228

N

National Student Exchange	Charles A. Haywood	209 Harris, Box 7316	3499
Navy ROTC	Lt. Edward Henkler	104 Reynolds Coliseum, Box 7310	2757
News Services (See Information Services)			
North Campus Bookshop	Jean P. Emerson	Erdahl-Cloyd Annex, Box 7224	3831
North Carolina Japan Center	John Sylvester Jr.	5 Rosemary St., Box 8112 ..	3450
North Carolina Vocational Assn.	Bill Maness	510-D Poe, Box 7801	2494
Nuclear Engineering Head	Paul J. Turinsky	1110-B Burlington, Box 7909	2301, 2302
Nuclear Reactor Program Director	Bernard W. Wehring	2117 Burlington, Box 7909	2321
Assoc. Dir.	Garry D. Miller	2119 Burlington, Box 7909	2321
Nutrition Program Coordinator	J. D. Garlich	22 Scott, Box 7608	2628

O

Occupational Education Head	Joseph R. Clary	502-L Poe, Box 7801	2234
Agri'l. Educ. Coord.	L. R. Jewell	602-M Poe, Box 7801	2234
Graphic Comm. Coord.	Garland K. Hilliard	510-N Poe, Box 7801	2234
Health Occupations Educ. Coord.	Judith A. Davis	510-C Poe, Box 7801	2234
Indus. Arts Educ. Coord.	Richard E. Peterson	300 Poe, Box 7801	2234
Indus. & Tech. Educ. Acting Coord.	Joseph R. Clary	502-L Poe, Box 7801	2234
Off-Campus Housing		201-A Harris, Box 7315	3821
Operations Research Chairman	Salah E. Elmaghraby	322-A Riddick, Box 7914	2350
Outlying Agri'l. Res. Stations Dir., NCDA	P. H. Kelley	P.O. Box 27647, Raleigh, 27611	733-3236

P

Parking Services		100 Coliseum, Box 7222	2120, 3269
Payroll and Benefits Acting Director	Jill Worthington	Admn. Serv. Ctr., Box 7215	2151
Asst. to Dir.	Andre Carson	Admn. Serv. Ctr., Box 7215	2151
Benefits Mgr.	Fran S. Weston	Admn. Serv. Ctr., Box 7215	2151
Peace Corps Recruiter		1 Patterson, Box 7112	3818
Personnel Services (See Human Resources)			
Pest Management Curriculum (IPM) Coordinator	Blanche C. Haning	2705 Bostian, Box 7613	3341
Pesticide Residue Research Laboratory Director	T. J. Sheets	3709 Hillsborough St., Box 8604	3391
Philosophy and Religion Head	Robert S. Bryan	100 Winston, Box 8103	2477

Office	Head	Address	Phone
Photographic Services		Ricks Annex, Box 7603	2861
Physical and Mathematical Sciences, School of			
Dean	Garrett Briggs	118 Cox, Box 8201	7277
Assoc. Dean, Academic			
Affairs	Robert D. Bereman	122-A Cox, Box 8201	7833
Assoc. Dean, Research	Leslie B. Sims	113 Cox, Box 8201	7865
Afro-American Stu. Coord./Coop.			
Educ. Coord.	Wandra P. Hill	121 Cox, Box 8201	7841
Physical Education			
Dept. Office		2000 Carmichael, Box 8111	2487, 2488
Head	Richard A. Lauffer	2002 Carmichael, Box 8111	3361
Intramural-Recreational			
Sports	Samuel C. Halstead	2012 Carmichael, Box 8111	3161, 3162
Locker Room		Box 8111	3508
Physical Plant			
Director	Charles C. Braswell	100 Morris, Box 7219	2181
Asst. Dir., Engineering	Carl D. Fulp	10 Riddick Stadium, Box 7219	2181
Asst. Dir., Gen. Serv.	Gary Y. Coates	103 Morris, Box 7219	2181
Asst. Dir., Oper.	Lawrence B. Bradley	109 Morris, Box 7219	2181
Asst. Dir., Veterinary Serv.	W. D. Brazeal	4700 Hillsborough St., Box 8401	829-4217
Asst. to Dir.	Page Billingsley	101 Morris, Box 7219	2181
Admn. Serv. Supt.	George F. Lynch	200 Morris, Box 7219	2180
Auto. Serv. Supt.	F. Randy Bowen	Motor Pool Bldg., Box 7219	2179
Boiler House (nights, weekends, holidays—emergencies—Vet School)			829-4216
Budget	Edward B. Phillips	209 Morris, Box 7219	2180
Bldg. Services Supt.	Berry Dunston	4 Park Shops, Box 7219	3323
Const. & Estimating Supt.		Morris, Box 7219	2184
Design Serv. Supt.	Donald A. Iddings	7 Morris, Box 7219	2184
Elect. Syst. Supt.		16 Morris, Box 7219	2184
Landscape Serv. Supt.	Frank B. Bynum Jr.	Land. Serv. Bldg., Box 7219	3401, 3408
Management Engr.	Richard Hardee	109 Morris, Box 7219	2181
Mech. Syst. Supt.	Lewis M. Strong	17 Morris, Box 7219	2184
Motor Pool	Gayle Franks	Motor Pool Bldg., Box 7219	2179
Personnel	Bobby F. Holloway	204 Morris, Box 7219	2180
Steam Utility Supt.	C. Tommy Barefoot	13 Morris, Box 7219	2181
Trade Serv. Supt.	Roy Munden	2 Park Shops, Box 7219	3323
Work Center/Scheduling			
Officer	Jennifer F. Burdick	128 Morris, Box 7219	2991
Physical Sciences Research			
Director	Leslie B. Sims	115 Cox, Box 8201	7865
Physics			
Head	R. R. Patty	105 Cox, Box 8202	2521, 2522
Graduate Administrator	G. E. Mitchell	106 Cox, Box 8202	2521, 2522
Physiology Program			
Coordinator	J. H. Britt	231 Polk, Box 7621	2768
Phytotron (S. E. Plant Env. Lab)			
Director	R. J. Downs	2003 Gardner, Box 7618	2778
Placement (See Career Planning and Placement)			
Plant Pathology			
Dept. Office		2518 Gardner, Box 7616	2735, 2736, 2737
Head	William L. Klarman	2518 Gardner, Box 7616	2730
Ext. Plant Pathology	H. E. Duncan	1410 Gardner, Box 7616	2711, 2712
Plant Disease & Insect Clinic		1300 Gardner, Box 7616	3619

Office	Head	Address	Phone
Graduate Student Offices		3419 Gardner, Box 7616	2753
Graduate Coordinator	D. M. Benson	840 Method Rd., Box 7629 ..	3966
Int'l. Meloidogyne Contract Lab.		1415 Gardner, Box 7616	3488
Biological Sciences Greenhouse			3137
Air Quality Field Research Lab	A. S. Heagle	3908 Inwood Rd., Unit #2 ...	3728
840 Method Road	K. R. Barker	Unit #2, Box 7628	3330
840 Method Road	D. M. Benson	Unit #3, Box 7629	3966
840 Method Road	R. A. Reinert	Unit #3, Box 7629	3962
840 Method Road	S. R. Shafer	Unit #2, Box 7628	2142
Plant Sci. Res., USDA	D. P. Schmitt	3127 Ligon St., Box 7631	3905
Tobacco Headhouse			3306
Police—Campus	Communications Ctr.	Field House, Box 7220	3333
Political Science and Public Administration			
Head	Marvin S. Soroos	215 Link, Box 8102	2481, 2482
Asst. Head, Scheduling Officer	John H. Gilbert	217 Link, Box 8102	2481, 2482
Dir., MPA Prog.	Erika S. Fairchild	220 Link, Box 8102	2481, 2482
Dir., MA Prog.	Harvey G. Keschull	218 Link, Box 8102	2481
Dir., Criminal Justice Option	Joel B. Rosch	229 Link, Box 8102	2481, 2482
Dir., Law & Political Philosophy			
Concentration	Sanford H. Kessler	208 Link, Box 8102	2481, 2482
Dir., Undergrad. Advising			
& Freshman Advisor	Keith S. Petersen	217 Link, Box 8102	2481, 2482
Coord., Undergrad.			
Internships	Jackson M. McClain	207 Link, Box 8102	2481, 2482
Coord., Grad. Internships and			
Placement	Elizabethann O'Sullivan	219 Link, Box 8102	2481, 2482
Poultry Science			
Head	James E. Marion	120 Scott, Box 7608	2626
Ext. Poultry Science	T. A. Carter	208 Scott, Box 7608	2621
Premedical Program			
Chairman		1628 Gardner, Box 7617	2402
Product Design			
Head	Vincent M. Foote	220 Brooks, Box 7701	2204, 2205, 2206
Productivity Research and Extension Program (PREP)			
Dir.	William A. Smith Jr.	324 Riddick, Box 7906 ..	733-2370
Program Office		3114 Univ. Stu. Ctr. Box 7306	2451, 2453
Provost and Vice Chancellor's Office			
Provost and Vice			
Chancellor	Nash N. Winstead	109 Holladay, Box 7101	2195
Assoc. Provost	Murray S. Downs	1 Holladay, Box 7101	2194
Assoc. Provost and Affirmative Action			
Officer/Compliance Officer			
for Title IX	Lawrence M. Clark	201 Holladay, Box 7101	3148
Asst. Provost for Academic			
Computing	Henry E. Schaffer	M2A Hillsborough Bldg. Box 7109	2516
Psychology			
Head	Paul W. Thayer	640-D Poe, Box 7801	2251
Public Administration Program	Erika S. Fairchild	220 Link, Box 8102	2481, 2482
Public Safety			
Emergency			3333
Director	Chief James W. Cunningham	101 Field House, Box 7220 ..	2157
Deputy Dir.,			
Admin.	Capt. Miles J. Heckendorn III	103 Field House, Box 7220 ..	2156
Deputy Dir., Life Safety			
Servs.	Bruce L. Macdonald	105-A Field House, Box 7220	2568
Deputy Dir., Operations	Capt. Larry D. Liles	103 Field House, Box 7220 ..	3206
Auxiliary Functions Coord.	E. Susan Edwards	103 Field House, Box 7220 ..	2156
Auxiliary Functions Sgt.	Sgt. Joellen M. Nader	103 Field House, Box 7220 ..	2156
Support Services Coord.	Lt. Terry Abney	103 Field House, Box 7220 ..	2156
Support Services Sgt.	Sgt. C. Renee Wood	103 Field House, Box 7220 ..	2156

Office	Head	Address	Phone
Crime Prevention Officer	Ptl. Penelope H. McLeod	103 Field House, Box 7220 ..	2156
Investigations			
Coord.	Det. Sgt. Laura K. Reynolds	103 Field House, Box 7220 ..	2498
Hazardous Waste Spec.	Larry A. Chako	105-A Field House, Box 7220 ..	2999
Box 7220			
Health & Safety Officer	Denise S. Taylor	105-A Field House, Box 7220 ..	2568
Industrial Hygienist	Thomas L. Must	Field House, Box 7220 ..	2568
Sr. Life Safety Inspector	Floyd S. Sellers	105-A Field House, Box 7220 ..	2568
Shift Commanders	Sgt. Lisa D. Biggs	103 Field House, Box 7220 ..	3206
	Sgt. Teresa Crocker	103 Field House, Box 7220 ..	3206
	Sgt. Robyn G. Lee	103 Field House, Box 7220 ..	3206
	Sgt. Wesley J. Shattuck	103 Field House, Box 7220 ..	3206
Publications, Agri'l. Ext. and Agri'l. Res. Serv.	Thomas W. Knecht	318 Ricks, Box 7603	3173
Publications, Student	Ann Valentine	3134 Univ. Stu. Ctr., Box 7306	2413
	Rodney Woodlief	3134 Univ. Stu. Ctr., Box 7306	2413
Pulp and Paper Science	R. G. Hitchings	2106 Robertson, Box 8005 ..	2888
Purchasing			
Director	Ed Sikoski	214 Alumni, Box 7212	2171
Systems Coord.	Linda Allred	217 Alumni, Box 7212	2171
Risk & Insurance Mgr.	Anne Hitchcock	217-B Alumni, Box 7212	2171
Purchasing Mgr.	Felton Tilley	200 Alumni, Box 7212	2171
Administrative Mgr.	Katherine Suggs	216 Alumni, Box 7212	2171
Data Control Supv.	Judy Shepherd	216 Alumni, Box 7212	2171
Purchasing Officer	Bob Knoll	201 Alumni, Box 7212	2171
Purchasing Officer	Annette Wahab	204 Alumni, Box 7212	2171
Purchasing Officer	Matthew Mills	217 Alumni, Box 7212	2171
Purchasing Officer	Richard Williams	206 Alumni, Box 7212	2171
Purchasing Agent	Mary Sanders	210 Alumni, Box 7212	2171
Interior Designer	Briget Pollock	220 Alumni, Box 7212	2171
Status Information			2171

R

Radiation Protection Office			
Radiation Protection Officer	D. W. Morgan	214 Clark Labs., Box 7108 ..	2894
Assoc. Radiation Protection Officer	D. B. Beasey	214 Clark Labs., Box 7108 ..	2894
Chairman, Radiation Protection Council	John F. Roberts	1617 Gardner, Box 7617	2580
Radio Station			
WKNC-FM	Charles Helms	3122 Univ. Stu. Ctr., Box 8607	2400
Reading Education Program			
Coordinator	Barbara J. Fox	402 Poe, Box 7801	3221
Recreation Resources Administration			
Head	M. Roger Warren	4008-C Biltmore, Box 8004	3276
Registration and Records			2572
Univ. Registrar	James H. Bundy	100 Harris, Box 7313	2576
Asst. Registrar	Donald E. Patty	100 Harris, Box 7313	3084
Asst. Registrar	Ellen L. Teague	100 Harris, Box 7313	3084
Asst. Registrar	Martha M. Welch	100 Harris, Box 7313	2576
Readmissions		100 Harris, Box 7313	2572
Scheduling (Classrooms)	Anita Hanover	100 Harris, Box 7313	2577
Student Records & Transcripts		100 Harris, Box 7313	2572
Veterans Affairs		100 Harris, Box 7313	3048
Religious Affairs (See Cooperative Campus Ministry)			

Office	Head	Address	Phone
Research			
Vice Chancellor	Franklin D. Hart	103 Holladay, Box 7003	2117
Assoc. Vice Chan.	Philip B. Carter	1 Holladay, Box 7003	7199
Assoc. Dean	Howard W. Etzel	1 Holladay, Box 7003	7199
Dir., Sponsored Programs	Linda F. Jackson	Leazar, Lower Level, Box 7003	2444
Dir., Technology Admin.	Becky R. French	1 Holladay, Box 7003	7199
GC/MS Facility	Carol A. Haney	1141 Burlington, Box 7003	3746
Residence Halls			
Alexander	Gail Trombley	Alexander, Box 7315	2925
Bowen	Kokeita Miller	Bowen, Box 7315	2901
Bragaw	Julie Urquhart	Bragaw, Box 7315	2903
Carroll	Eileen Carraras	Carroll, Box 7315	2905
Lee	Susan Johnson	Lee, Box 7315	2900
Metcalf	Kathy Bull	Metcalf, Box 7315	2908
Middle East (Syme, Gold, Welch)	Brenda Holleman	Syme, Box 7315	3605
North	Donnie Eason	North, Box 7315	3651
Owen	Brenda Young	Owen, Box 7315	2924
Quad (Berry, Becton, Bagwell)	Beverly Jones	Berry, Box 7315	3901
South	Iris Hunt	South, Box 7315	2792
Sullivan	Julia Roberts	Sullivan, Box 7315	2921
Tucker	Sam Strong	Tucker, Box 7315	2922
Turlington	Reid Nichols	Turlington, Box 7315	2929
Watauga	Skeet Gray	Watauga, Box 7315	7969
Residential Scholars Programs Coord.	Alex Miller	102 Sullivan, Box 7316	2353
ROTC (See Air Force, Army and Navy)			

S

Sea Grant College Program, UNC			
Director	B. J. Copeland	105 1911 Bldg., Box 8605 ...	2454
Assoc. Dir.	Ronald G. Hodson	105 1911 Bldg., Box 8605 ...	2454
Dir., Communications	Kathy Hart	105 1911 Bldg., Box 8605 ...	2454
Dir., Marine Advisory Serv.	James D. Murray	105 1911 Bldg., Box 8605 ...	2454
Snack Bar Operations	Walter E. Barkhouse	Quad, Box 7307	2124
Bragaw Snack Bar	Barbara Okoh	Bragaw, Box 7307	3095
Erdahl-Cloyd Annex	Randy Lait	Erdahl-Cloyd Annex, Box 7307	3270
McKimmon Ctr. Snack Bar	Janet Throne	McKimmon Ctr., Box 7307	3090
Quad Snack Bar	Marilyn Atkins	Quad, Box 7307	2124
Shuttle Inn	Rose Stewart	Nelson, Box 7307	2128
Syme Snack Bar	Sallie Lane	Syme, Box 7307	2127
Tunnel Inn	Madeline Carter	SSS Bldg., Box 7307	2166
Social Studies Education	Charles Harper	408 Poe, Box 7801	3221
Sociology and Anthropology Head	Luther B. Otto	301 1911 Bldg., Box 8107	3180, 3917
Acting Asst. Head	William B. Clifford	336 1911 Bldg., Box 8107	2702, 2610
Asst. Head	Mary L. Walek	306 1911 Bldg., Box 8107 ...	3114
Ext. Spec.-in-Charge	Maurice E. Voland	237 1911 Bldg., Box 8107 ...	2670
Grad. Administrator	Robert L. Moxley	315 1911 Bldg., Box 8107	2702, 2610
Dir., Social Work	P. Nelson Reid	334 1911 Bldg., Box 8107	3291, 3299
Soil Science			
Head	R. H. Miller	2234 Williams, Box 7619	2655, 2656
Academic Programs	H. J. Kleiss	2228 Williams, Box 7619	2643

Office	Head	Address	Phone
Extension Programs	J. V. Baird	3403 Williams, Box 7619	3285
International Programs	P. A. Sanchez	3104 Williams, Box 7619	2838
Solar House		Box 7401	3799
Sororities			
Panhellenic Council	Donna White	214 Harris, Box 7314	2441
Alpha Delta Pi	Margie Hodges	2709-B W. Fraternity Ct. 27606	834-1550
Alpha Kappa Alpha	Carlotta Miller	214 Harris, Box 7314	2441
Alpha Xi Delta	Rhonda Boros	214 Harris, Box 7314	2441
Chi Omega	Beth Donleycott	1616 Crest Rd.,	782-3796
Delta Sigma Theta	Melanie Streeter	214 Harris, Box 7314	2441
Sigma Kappa	Laura Anderson	2709-A W. Fraternity Ct. 27606	833-4710
Southeastern Plant Environment Lab. (see Phytotron)			
Southern Engineer		10 Page, Box 7901	2240
Special Education Program			
Coordinator	Cathy L. Crossland	402 Poe, Box 7801	3221
Speech-Communication			
Head	William J. Jordan	206 Winston, Box 8104	2450, 3204, 3247
Asst. Head	Raymond S. Rodgers	214-A Winston, Box 8104	2450, 3204, 3247
Speech, Hearing and Language Clinic	Gail Schumacher	222 Winston, Box 8104	3767, 2450, 3204
Speech-Communication Audio ...	James Alchediak	2316-B Library, Box 8104 ...	3303
	Edward Funkhouser	2316 Library, Box 8104	3303
	Robert Schrag	207 Winston, Box 8104	2450
Sports Information (Varsity)			
Dir.	Ed Seaman	Case Athl. Ctr., Box 8501	2102
State Employees' Credit Union (See Credit Union)			
'Statelog'	Lucy Coulbourn	219 Oberlin Rd., Box 7504 ..	3470
Statistics			
Dept. Office		110 Cox, Box 8203	2528
Head	Daniel L. Solomon	110-A Cox, Box 8203	2420
Grad. Administrator	Thomas M. Gerig	111 Cox, Box 8203	2528
Undergrad. Administrator	John L. Wasik	614-F Cox, Box 8203	2532
Biomathematics Graduate Program		513 Cox, Box 8203	2271
Grad. Stu. Offices		5th Floor Cox, Box 8203	2543
Grad. Stu. Offices		6th Floor Cox, Box 8203	3925
Grad. Stu. Offices		5th Floor Dabney, Box 8203	2489
Student Accounts (Tuition & Fees)			
Director	W. R. Styons	2 Peele, Box 7213	2986
Cashiers	Paulette Kearney	2 Peele, Box 7213	2988
	Jerry LaGarde	2 Peele, Box 7213	2988
Loan Section	James Sweet	2 Peele, Box 7213	2985
Student Address Information (See University Student Center)			
Student Affairs			
Vice Chancellor	Thomas H. Stafford Jr.	101 Holladay, Box 7301	2446
Asst. to Vice Chan. for Stu. Affairs			
Univ. Dining	Arthur L. White	4112 Univ. Stu. Ctr., Box 7307	3090
Assoc. Vice Chan.	Henry Bowers	3111 Univ. Stu. Ctr., Box 7306	2452
Assoc. Vice Chan.	Ronald C. Butler	205 Peele, Box 7317	2962
Assoc. Vice Chan.	Gerald G. Hawkins	210 Harris, Box 7316	3151
Assoc. Vice Chan.	Charles A. Haywood	209 Harris, Box 7316	3499
Student Center (See University Student Center)			
Student Development			
Director	Evelyn Reiman	216 Harris, Box 7314	2441
Asst. Dir.	Michael Borden	220 Harris, Box 7314	2441
Asst. Dir.	Robert S. Bryan Jr.	214 Harris, Box 7314	2441

Office	Head	Address	Phone
Coord., Judicial Progs.		212 Harris, Box 7314	2963
Frat. Ct. Manager		212 Harris, Box 7314	2441
Coord., Afro-American Stu. Aff.	Endia Hall	211 Harris, Box 7314	3835
Student Employment (part-time work) Counselor	Mary Usry	216 Peele, Box 7302	2421
Student Family Housing Coord.	Bob Paisley	E.S. King Vlg., Box 7315 ...	2430
Student Government President, Student Body	Gary Mauney	4130 Univ. Stu. Ctr., Box 7306	2797
President, Student Senate	Walter N. Perry	4130 Univ. Stu. Ctr., Box 7306	2797
Treasurer	Bryan Kay	4130 Univ. Stu. Ctr., Box 7306	2797
Attorney General	John Nunnally	4130 Univ. Stu. Ctr., Box 7306	2797
Student Legal Advisor	Ronnie Hazen-Graham	4130 Univ. Stu. Ctr., Box 7306	2797
Student Publications (See Publications)			
Student Records and Transcripts		100 Harris, Box 7313	2572
Students Supply Stores			
Director	G. Robert Armstrong	SSS Bldg., Box 7224 ...	2161, 3117
Assoc. Director	Douglas Small Jr.	SSS Bldg., Box 7224 ...	2161, 3117
Book Division Mgr.	Thomas V. Setzer	SSS Bldg., Box 7224	3117
Book Div. Asst. Mgr.	Donald Bonnewell	SSS Bldg., Box 7224	3117
Book Sales Floor Supv.	Raymond Wanchock	SSS Bldg., Box 7224	3117
Merchandise & Mktg. Div. Mgr.	Richard Hayes	SSS Bldg., Box 7224	2161
Computer Sales	Clarence Morgan	SSS Bldg., Box 7224	2161
General Mdse.	Edith Purvis	SSS Bldg., Box 7224	2161
Supplies	Edward York	SSS Bldg., Box 7224	2161
Operations Division Mgr.	James Garrison	SSS Bldg., Box 7224	2161
North Campus Bookshop Supv.	Ada Braswell	Erdahl-Cloyd Annex, Box 7224	3831
Personnel Mgr.	Aline Roberson	SSS Bldg., Box 7224	2161
Accounting Supv.	Mary Sigmon	SSS Bldg., Box 7224	2161
Study Abroad	Dave Stuckey	105 Alexander	2087
Summer Institute in English for Speakers of Other Languages			
Director	Virginia M. Prichard	134 Harrelson, Box 8106	3297
Summer Sessions			
Director	John F. Cudd Jr.	145-C McKimmon, Box 7401	2265
Asst. Dir.		145-E McKimmon, Box 7401	2265

T

Technical Information Center	M. Ronald Simpson	1129 Library, Box 7111	2839,2830
Technician Editor	John Austin	3120 Univ. Stu. Ctr., Box 8608	2411
Technology Administration Director	Becky R. French	1 Holladay, Box 7003	2355
Telecommunications Director	Miriam Tripp	Admn. Serv. Ctr., 2nd Floor, Box 7217	7046
Office Mgr.	Olive A. Stone	Admn. Serv. Ctr., 2nd Floor, Box 7217	2141
Television (UNC Center for Public Television)			
Production Coord.	Richard Snavely	211-A Television Ctr., Box 8601	2853

Office	Head	Address	Phone
Textile Chemistry			
Head	C. D. Livengood	115 Clark Labs, Box 8302	2551
Asst. Head & Grad. Admin.	G. N. Mock	115 Clark Labs, Box 8302	2551
Textile Engineering and Science			
Head	S. P. Hersh	102 Nelson, Box 8301	3253
Assoc. Head & Grad. Admin.	B. S. Gupta	108 Nelson, Box 8301	3253
Textile Management and Technology			
Head	G. A. Berkstresser	142 Nelson, Box 8301	3442
Asst. Head & Acad. Coord.	M. L. Robinson	144 Nelson, Box 8301	3485
Grad. Admin.	P. A. Tucker	B-49 Nelson, Box 8301	3469
Textiles Extension			
Assoc. Director	L. T. Lassiter	B-22 Nelson, Box 8301	3469
Textiles, School of			
Dean	D. S. Hamby	101 Nelson, Box 8301	3231
Assoc. Dean	P. L. Grady	107 Nelson, Box 8301	3059
Assoc. Dean, Academic Programs	M. H. Mohamed	126 Nelson, Box 8301	3485
Assoc. Dean, Textile Research & Graduate Studies	W. K. Walsh	107-B Nelson, Box 8301	3057
Asst. to the Dean for Student Serv. & Placement Dir.	C. L. Barton	120 Nelson, Box 8301	3780
Textiles Library	Barbara Best-Nichols	112 Nelson, Box 8301	3043
Theatres			
Center Stage		Univ. Stu. Ctr., Box 7306	3900
Stewart	Vickie L. Marmarose	Univ. Stu. Ctr., Box 7306	3104
Thompson	Charles A. Martin Jr.	Thompson Bldg., Box 7305	2405, 3147
Tobacco Literature Service	Pamela E. Puryear	2314 Library, Box 7111	2836, 2837
Toxicology Program			
Chairman	Ernest Hodgson	1519 Gardner, Box 7613	2274
Transcripts and Student Records		100 Harris, Box 7313	2572
Transportation			
Director	Janis Y. Rhodes	139 Admn. Serv. Ctr., Box 7221	3424
Assoc. Dir., Admin. & Parking Services		139 Admn. Serv. Ctr., Box 7221	3424
Assoc. Dir., Operations		139 Admn. Serv. Ctr., Box 7221	3424
Asst. Dir., Engineering		139 Admn. Serv. Ctr., Box 7221	3428
Asst. Dir., Financial Serv.		139 Admn. Serv. Ctr., Box 7221	3428
Parking Serv. Mgr.		139 Admn. Serv. Ctr., Box 7221	2120
Parking Control		139 Admn. Serv. Ctr., Box 7221	3428
Parking Violations Petition Coord.	Melissa Watkins	139 Admn. Serv. Ctr., Box 7221	3875
Visitor Info. Center		Yarbrough Dr., Box 7221	3205
Special Events Coord.		139 Admn. Serv. Ctr., Box 7221	3424
Travel Audit			
Supv.	Tassie Brooks	213 Admn. Serv. Ctr., Box 7203	3152
Triangle Universities			
Computation Center	Leland H. Williams	Box 12076, Res. Tri. Park	549-0671
TV, Closed Circuit Prog.	Lee Downs	2324 Library, Box 7111	3895

U

University Cashier	Jerry LeGarde	2 Peele, Box 7213	2988
University Dining			
Asst. to Vice Chan. for Stu.			
Aff. for Univ. Dining	Arthur L. White	3805 Beryl Rd., Box 7307 ...	3718
Assoc. Dir. of Univ. Dining	Zeph Putnam	3805 Beryl Rd., Box 7307 ...	7012
Asst. Dir., Univ. Stu. Ctr.	David Rittenhouse	B116 Univ. Stu. Ctr., Box 7307	2021
Dir., Contract Dining Serv.	Vickie F. Siliski	107A Dining Hall, Box 7307	3963
Dir., Operations	Walter E. Barkhouse	119 Reynolds Coliseum, Box 7307	2860
Dir., Reservations & Catering	Lucie R. Hunter	2102 Univ. Stu. Ctr., Box 7307	2021
University Graphics			
Manager	Scott G. Bertness	Univ. Graphics, Box 7226 ...	2131
Production Mgr.	Glenn G. Sanderson	Univ. Graphics, Box 7226 ...	2131
Copy Center Mgr.		Yarbrough at Morrison, Box 7226	3460
University Relations			
Director	Albert B. Lanier Jr.	12 Holladay, Box 7505	2850
Asst. Dir.	Beth A. McGee	10 Holladay, Box 7505	2850
Dir., Information Serv.	Lucy Coulbourn	219 Oberlin Rd., Box 7504 ..	3470
Coord., Spec. Proj.	Frances M. Milks	10 Holladay, Box 7505	2850
Univ. Comm. Coord.	Owen Weddle	10 Holladay, Box 7505	2850
Asst. Vice Chan., Comm.	Hardy D. Berry	9A Holladay, Box 7505	2850
Coord., Emerging Issues Forum	Betty Owen	10 Holladay, Box 7505	2850
Admn. Asst.	Patricia N. McLean	12 Holladay, Box 7505	2850
University Research Units			
Supt.-In-Charge	H. V. Marshall Jr.	108 Patterson, Box 7601 ...	2823
Unit 1	J. S. Starr	4616 Reedy Crk. Rd.	2713
Unit 2	K. M. Snyder	3720 Lake Wheeler Rd.	2759
Weather Data			833-9949
Unit 4	John Scott	4301 Beryl Rd.	3144
Unit 10	W. H. Sparrow Jr.	Rt. 1, Box 198-B, Bahama 27503	471-6872
University Student Center			
Director	Henry Bowers	Univ. Stu. Ctr., Box 7306 ...	2452
Assoc. Dir.	Lee R. McDonald	Univ. Stu. Ctr., Box 7306 ...	2558
Asst. Dir., Univ. Dining	David Rittenhouse	Univ. Stu. Ctr., Box 7307 ...	3090
Dir., Reservations & Catering	Lucie R. Hunter	2102 Univ. Stu. Ctr., Box 7307	3090
Craft Ctr. Dir.	Conrad W. Weiser	Thompson Bldg., Box 7305	2457
Curator of Art	Charlotte V. Brown	Univ. Stu. Ctr., Box 7306 ...	3503
Program Office		3114 Univ. Stu. Ctr., Box 7306	2451, 2453
Reservations	Michelle Hall	Univ. Stu. Ctr., Box 7306 ...	2249
Student Address & Info.	Information Center	Univ. Stu. Ctr., Box 7306 ...	3138
Student Center President	Ellen Page	Univ. Stu. Ctr., Box 7306 ...	2453
University Studies, Division of			
Head	John M. Riddle	144 Harrelson, Box 7107	2479, 2470
University Temporary Service			
Manager	Kathy Pendergraft	Admn. Serv. Ctr., Box 7210	7060
Upward Bound Dir.	Cynthia J. Harris	205 Peele, Box 7317	3632
Counselor		205 Peele, Box 7317	3632
Urban Affairs and Community Services, Center for			
Director	Grover J. Andrews	217 McKimmon, Box 7401	3010, 3373
Assoc. Dir.	Peter Meyer	289 McKimmon, Box 7401 ..	3211

Office	Head	Address	Phone
USDA-ARS—Agricultural Research Service			
Location Leader	D. E. Moreland	4123 Williams, Box 7620	2661
Admn. Officer	E. J. Foley	51 Kilgore, Box 7610	2731
Air Quality—Plant Growth & Development Res.	W. W. Heck	1509 Varsity Dr., Box 7620	3311
Boll Weevil Eradication Res.	W. Dickerson	4116 Reedy Creek Rd.,	3560
		27607	
Food Sci. Res.	H. P. Fleming	322-A Schaub, Box 7624	2979
Forage Res.	J. C. Burns	1316 Williams, Box 7620	2657
Market Quality & Handling Res.	J. W. Dickens	126 Weaver, Box 7625	3101
Plant Physiology & Photosynthesis Res.	D. E. Moreland	4123 Williams, Box 7620	2661
Plant Sci. Res.	C. W. Stuber	3627 Gardner, Box 7614	2289
Soybean & Nitrogen Fixation Res.	R. F. Wilson	4114-B Williams, Box 7620	3267

V

Veterans Affairs		100 Harris, Box 7313	3048
Veterinary Anatomy, Physiological Sciences & Radiology			
Head	A. L. Aronson	4700 Hillsborough St., Box 8401	829-4220
Veterinary Companion Animal & Special Species Medicine			
Head	S. W. Crane	4700 Hillsborough St., Box 8401	829-4230
Veterinary Food Animal & Equine Medicine			
Head	W. D. Oxender	4700 Hillsborough St., Box 8401	829-4240
Veterinary Medical Library			
Librarian	T. J. Fischer	4700 Hillsborough St., Box 8401	829-4219
Veterinary Medicine, School of			
Operator/Information			829-4200
Dean	T. M. Curtin	4700 Hillsborough St., Box 8401	829-4210
Business Officer	J. W. Green	4700 Hillsborough St., Box 8401	829-4383
Academic Affairs			
Assoc. Dean & Dir.	D. R. Howard	4700 Hillsborough St., Box 8401	829-4212
Biomedical Communications Dir.	P. J. Difatta	4700 Hillsborough St., Box 8401	829-4206
Research & Graduate Studies			
Assoc. Dean & Dir.	C. E. Stevens	4700 Hillsborough St., Box 8401	829-4213
Student Admissions Dir.	M. C. Motley	4700 Hillsborough St., Box 8401	829-4205
Veterinary Medical Services			
Assoc. Dean & Dir.	W. M. Adams	4700 Hillsborough St., Box 8401	829-4211
Veterinary Animal Resources			
Dir.	C. W. McPherson	4700 Hillsborough St., Box 8401	829-4280
Veterinary Equine Research Ctr. ...	Clifton McLean	Southern Pines	692-8773
Veterinary Microbiology, Pathology & Parasitology			
Head	Leroy Coggins	4700 Hillsborough St., Box 8401	829-4250
Veterinary Services			
To report malfunctions & breakdowns			
Veterinary Serv. Sec. (during working hours)		4700 Hillsborough St., Box 8401	829-4217

Office	Head	Address	Phone
Boiler House (nights, weekends or holidays)			829-4216
Veterinary Teaching Hospital		4700 Hillsborough St., Box 8401	829-4260
		If no answer	829-9536
Visual Communications		G-1 Ricks, Box 7603	2861
Visual Design	Vincent M. Foote	220 Brooks, Box 7701	2204, 2205, 2206
Volunteer Services	James Jones	3112 Univ. Stu. Ctr., Box 7306	3193

W

Water Resources Research Institute			
Director	David H. Moreau	225 Page, Box 7912	2815
Assoc. Dir.	James M. Stewart	225 Page, Box 7912	2815
Admn. Off.	Linda Lambert	225 Page, Box 7912	2815
Windhover Editor	Amber Clemons	3132 Univ. Stu. Ctr., Box 7306	3614
WKNC-FM Radio Station			
Manager	Charles Helms	3122 Univ. Stu. Ctr., Box 8607	2401
Wolfpack Club			
Director	Charlie Bryant	College Inn, Box 8602	2112
Wood and Paper Science			
Head	Richard J. Thomas	1022-N Biltmore, Box 8005	3181
Wood Products Lab	Robert C. Gilmore	Hodges Lab, Box 8005	2881

Z

Zoology			
Head	John G. Vandenberg	2123 Gardner, Box 7617	2741
Graduate and Undergraduate			
Coord.	Grover C. Miller	1627 Gardner, Box 7617	2588
Fisheries and Wildlife Coord.	Richard L. Noble	2115 Gardner, Box 7617	2741
Small Animal Facility	Leamon Lassiter	Ligon St., Box 7617	3218

OFF-CAMPUS STATIONS

ADMINISTRATION

Director, P. H. Kelley, NCDA	733-3236
P.O. Box 27647, Raleigh, 27611	
Asst. Dir., Carl V. Tart, Jr.	733-3236
Admn. Asst., Alice J. Honeycutt	733-3236
Consulting Engineer, L. W. Hedspeith	733-3236
Consulting Engineer, E. F. Wiggins	733-3236
Border Belt Tobacco Research Station (NCDA)	648-4703
Supt.—George B. Clark, Rt. 1, Whiteville 28472	
Weather Data	648-4666
Central Crops Research Station (NCSU)	553-2141
Supt.—W. R. Baker Jr., Box 303, Clayton 27520	
Weather Data	553-4810
Chinqua-Penn Plantation	349-4576
Director—Douglas S. Merritt, Rt. 8, Box 682, Reidsville 27320	
Horticultural Crops Research Station (NCSU)	675-2314
Supt. T.L. Blake, Rt. 2, Box 610, Castle Hayne 28429	
Weather Data	675-9949
Horticultural Crops Research Station (NCDA)	592-7839
Supt.—Fred E. Cumbo, Rt. 5, Box 43, Clinton 28328	
Weather Data	592-1697
Lower Coastal Plain Tobacco Research Station (NCSU)	527-3579
Supt.—S. T. Barnes, Rt. 1, Box 442-A, Kinston 28501	
Minerals Research Laboratory, Asheville	704-258-6155
Chief Engineer—Immo H. Redeker, 180 Coxe Ave., Asheville 28801	
Mountain Horticultural Crops Research Station (NCSU)	704-684-7197
Supt.—Harley E. Blackwell, 2016 Fanning Bridge Rd., Fletcher 28732-9628	
Weather Data	704-687-1994
Mountain Research Station (NCDA)	704-456-3943
Supt.—J. R. Edwards, 516 Test Farm Rd., Waynesville 28786	
Oxford Tobacco Research Station (NCDA)	693-2483
Supt.—W. C. Clements, Box 1114, Oxford 27565	
Peanut Belt Research Station (NCDA)	348-2213
Supt.—Stephen C. Herlocker, Box 220, Lewiston 27849	
Weather Data	348-2255
Piedmont Research Station (NCDA)	704-278-2624
Supt.—B. N. Ayscue, Rt. 6, Box 420, Salisbury 28144	
Weather Data	704-278-9383
Sandhills Research Station (NCSU)	974-4673
Supt.—Clarence S. Black, Rt. 1, Jackson Springs 27281	
Weather Data	974-4748
Seafood Laboratory, Dept. of Food Science (NCSU)	726-7341
Ext. Spec.—David Green, P.O. Box 1137, Morehead City 28557	
Tidewater Research Station (NCDA)	793-4118
Supt.—John W. Smith, Rt. 2, Plymouth 27962	
Weather Data	793-2635
Upper Coastal Plain Research Station (NCDA)	442-7326
Supt.—Raymond D. Coltrain, Rt. 2, Rocky Mount 27801	
Weather Data	793-2635
Upper Mountain Research Station (NCDA)	982-2501
Supt.—Dana F. Tugman, Laurel Springs 28644	
Upper Piedmont Research Station (NCSU)	349-8347
Supt.—Howell O. Gentry Jr., Rt. 3, Reidsville 27320	
Veterinary Equine Research Center	692-8773
Director—Clifton McLean, P.O. Drawer 211, Southern Pines 28387	

COUNTY EXTENSION OFFICES

Alamance—201 Elm St.	
J. Rett Davis, Box 418, Graham	227-1482

Alexander—325 First Ave., S.W.	
B. G. Westbrook, Box 68, Taylorsville	704-632-4451
Alleghany—Community Bldg.	
Helen H. Dosier, Box 7, Sparta	372-5597
Anson—605 McLaurin St.	
J. Russell Sikes, Box 268, Wadesboro	704-694-2415
Ashe—County Office Bldg.	
James C. Carey, Jr., Box 338, Jefferson	246-3021
Avery—Courthouse	
J. Michael Pitman, Box 367, Newland	704-733-2415
Beaufort—Agriculture Bldg.	
Marion C. Griffin, Box 1967, Washington	946-0111
Bertie—Agricultural Bldg.	
William J. Griffin, Box 280, Windsor	794-3194
Bladen—Agricultural Service Ctr.	
M. Keith Dennis, Box 248, Elizabethtown	862-4591
Brunswick—Government Center	
R. Milton Coleman, Box 109, Bolivia	253-4425
Buncombe—Allen Center, 331 College St.	
Kenneth R. Reeves, Box 7667, Asheville	704-255-5522
Burke—Human Res. Center, East Parker Rd.	
H. Leslie Miller, Box 949, Morganton	704-433-4050
Cabarrus—745 Cabarrus Ave.	
Alvin M. Stanford, Box 387, Concord	704-782-0212
Caldwell—Agricultural Center	
Tom E. Andrews, 611 Lower Creek Dr., Lenoir	704-758-8451
Camden—County Office Bldg.	
Gordon E. Sawyer, Camden	338-0171
Carteret—Courthouse Square	
A. Ray Harris, Drawer 630, Beaufort	728-8421
Caswell—Agricultural Bldg.	
Larry N. Whitt, Box 220, Yanceyville	694-4158
Catawba—County Administrative Bldg.	
Edwin F. Nolley, Box 389, Newton	704-464-7880
Chatham—Agriculture Bldg.	
Carl Outz, Box 278, Pittsboro	542-3974
Cherokee—County Office Bldg.	
Jack E. Earley, 115 Peachtree St., Murphy	704-837-2210
Chowan—Hewes Hotel Bldg.	
John Michael Williams, Box 1030, Edenton	482-8431
Clay—Community Service Center	
Box 156, Hayesville	704-389-6301
Cleveland—County Office Bldg.	
130 S. Post Rd., Shelby	704-482-4365
Columbus—Courthouse Annex	
Garland McCullen, Box 569, Whiteville	642-2788, 642-2795
Craven—509 Broad St.	
J. William Dunham, Box 1340, New Bern	633-1477
Cumberland—County Office Bldg.	
George R. Autry, Box 270, Fayetteville	484-7156
Currituck—Courthouse	
M. Rodney Sawyer, Box 10, Currituck	232-2261
Dare—County Admin.	
Ann B. McLaughlin, Box 968, Manteo	473-2143
Davidson—County Bldg.	
W. C. Holtzmann, 301 E. Center St., Lexington	704-249-7011
Davie—County Office Bldg.	
Ronnie W. Thompson, Box 526, Mocksville	704-634-6297
Duplin—County Office Bldg.	
Lois Britt, Box 458, Kenansville	296-1996
Durham—Agriculture Bldg.	
Carl D. Hodges, 721 Foster St., Durham	688-2240
Edgecombe—County Admin. Bldg.	
James R. Pearce, Box 129, Tarboro	823-8131
Forsyth—Agriculture Bldg.	
Jerry W. Hardesty, 1450 Fairchild Dr., Winston-Salem	767-8213
Franklin—Agriculture Bldg.	
Cedric K. Jones, 307 E. Nash St., Louisburg	496-3344, 496-3449

Gaston—Agriculture Center	
Martha A. Burris, Box 476, Dallas	704-866-3002
Gates—Agricultural Bldg.	
Zackie W. Harrell, Box 46, Gatesville	357-1400
Graham—Main Street	
Raymond A. Norton, Box 486, Robbinsville	704-479-3361 (Ext. 223)
Granville—County Office Bldg.	
Mary B. Shurling, Box 926, Oxford	693-8806
Greene—229 Kingold Blvd.	
Herbert Ray Williams, Snow Hill	747-5831
Guilford—Agricultural Center	
David A. Boyd, Box 20428, Greensboro	375-5876
Halifax—Agricultural Bldg.	
Box 37, Halifax	583-5161
Harnett—County Office Bldg.	
James E. Goff, Box 1089, Lillington	893-3339
Haywood—Federal Bldg.	
H. E. McCall, Box 308, Waynesville	704-456-3575
Henderson—Agricultural Ext. Bldg., 740 Glover St.	
G. W. Westmoreland, Hendersonville	704-692-0216
Hertford—County Office Bldg.	
James E. Wright, Box 188, Winton	358-1591, 358-1501
Hoke—Magnolia St.	
Willie Featherstone, Box 578, Raeford	875-3461, 875-2162
Hyde—Agricultural Bldg.	
John E. DeWeese, Box 219, Swan Quarter	926-3201
Iredell—Agricultural Center, 201 E. Water St.	
Kenneth E. Vaughn, Box 311, Statesville	704-873-0507
Jackson—Community Service Center	
William Gerald McAbee, 102 Scotts Creek Rd., Sylva	704-586-4009
Johnston—Agriculture Bldg.	
Box 1457, Smithfield	934-5003
Jones—2 South Market St.	
Minton C. Small, Box 218, Trenton	448-9621
Lee—Courthouse Annex	
John Vann Hall, 225 S. Steele St., Sanford	775-5624
Lenoir—Federal Bldg.	
Johnnie Jones III, Box 757, Kinston	527-2191
Lincoln—Citizens Center	
David P. Choate, Box 68, Lincolnton	704-652-7121
McDowell—County Admin. Bldg., Room 122	
James R. Mabe Jr., Marion	704-652-7030
Macon—County Courthouse & Admin. Bldg.	
Robert W. Rollins, 5 W. Main St., Franklin	704-524-6421
Madison—Roberts Bldg.	
Earle Wise, Box 609, Marshall	704-649-2411
Martin—Agriculture Bldg.	
Leon Allen, Box 1148, Williamston	792-1621
Mecklenburg—700 N. Tryon St.	
Phil Haas, Charlotte	704-336-2561
Mitchell—Agricultural Bldg.	
David E. Terrell, Box 366, Bakersville	704-688-4811
Montgomery—Agricultural Bldg.	
Roy W. Reece Jr., Box 467, Troy	576-6011
Moore—Agricultural Bldg.	
Charles E. Hammond, Box 1149, Carthage	947-5800
Nash—Agricultural Ctr., Agricultural Center Dr.	
James D. Stephenson, Nashville	459-4141
New Hanover—Agricultural Extension Bldg.	
Charles E. Lewis, 6206 Oleander Dr., Wilmington	256-9933
Northampton—Agricultural Bldg.	
E. W. Rogister, Box 606, Jackson	534-2711
Onslow—Rm. 8, 604 College St.	
Dan E. Baucom, Jacksonville	455-5873
Orange—Agriculture Bldg.	
William E. Mainous, 109 Court St., Hillsborough	732-9361 (Ext. 440)
Pamlico—Courthouse Annex	
Richard F. May, Box 8, Bayboro	745-4121

Pasquotank—Agriculture Bldg.	
Donald W. Baker, Box 1608, Elizabeth City	338-3954
Pender—County Office Bldg.	
W. R. Jester III, Box 834, Burgaw	259-2330
Perquimans—Agricultural Bldg.	
Stanley J. Winslow, Box 87, Hertford	426-5428
Person—County Office Bldg.	
Frederick J. Rivers, Box 1115, Roxboro	599-1195
Pitt—County Office Bldg.	
Leroy James, 1717 W. 5th St., Greenville	758-1196
Polk—Extension-Education Bldg.	
O. Reagan Ammons, Box 187, Columbus	704-894-8218
Randolph—2222 S. Fayetteville St.	
T. S. Baker, Box 818, Asheboro	629-2131
Richmond—Courthouse US-1	
Earline G. Waddell, Box 1358, Rockingham	997-6251
Robeson—County Govt. Center	
Everett Davis, Box 2280, Lumberton	738-8111
Rockingham—County Center	
Frank M. Green, Rt. 4, Box 1, Reidsville	349-3371
Rowan—1216 W. Innes St.	
J. Harold Caudill, Box 1807, Salisbury	704-633-0571
Rutherford—Courthouse	
G. E. Biddix Jr., Rutherfordton	704-287-2211
Sampson—County Office Bldg.	
Worth Gurkin, Box 303-C, Clinton	592-7161
Scotland—County Govt. Center	
Ann M. Braswell, Box 749, Laurinburg	277-0470
Stanly—Courthouse	
J. Frank Simpson, 201 S. Second St., Albemarle	704-983-7269
Stokes—Co. Comm. Ser. Ctr.	
Susan M. Hilton, Box 60, Danbury	593-8179
Surry—County Agriculture Bldg.	
John B. Waddell, Box 324, Dobson	386-8265
Swain—Federal Bldg., Main St.	
C. D. Bunn, Drawer 1, Bryson City	704-488-9273
Transylvania—Community Services Bldg.	
Robert Hyatt, Box 786, Brevard	704-884-3109
Tyrrell—Agricultural Bldg.	
Frances S. Voliva, Box 209, Columbia	796-1581
Union—The Government Complex	
M. C. Howell Jr., 500 N. Main St., Monroe	704-289-5511
Vance—County Office Bldg.	
Donald W. Cobb, Box 1028, Henderson	438-8188
Wake—709 Wake County Court House	
Victor Lynn, Raleigh	755-6100
Warren—101 South Main St.	
Russel C. King, Warrenton	257-3640
Washington—Agricultural Bldg.	
Sandra C. Brown, Box 70, Plymouth	793-2223
Watauga—Rm. 104, Agricultural Services Ctr.	
Gene R. Brewer, Boone	704-264-3061
Wayne—Wayne Center	
W. T. Townsend, Box 68, Goldsboro	731-1520
Wilkes—County Bldg.	
Henry M. Ramseur, Wilkesboro	651-7300
Wilson—Agricultural Center	
Connie Jernigan, Box 3027, Wilson	237-0111
Yadkin—County Office Bldg.	
Jack L. Loudermilk, P.O. Box 97, Yadkinville	679-2061
Yancey—Courthouse, E. Main St.	
James H. Ray, Box 397, Burnsville	704-682-6186
Anita-Alta 4-H Outpost Camp	704-754-5745
Dir.—Eva Angley, Rt. 8, Box 376, Lenoir 28645	
Betsy-Jeff Penn 4-H Center	349-9445
Camp Coord.—Betsy Weddle, Rt. 3, Box 5A, Reidsville 27320	
Millstone 4-H Camp	652-6483
Dir.—Emogene Kernodle, Rt. 2, Box 70, Ellerbe 28338	

Mitchell 4-H Camp	326-3172
Dir.—Paul Ragan, Rt. 2, Swansboro 28584	
Sertoma 4-H Camp	593-8057
Dir.—Dan Ray, Rt. 1, Box 215, Westfield 27053	
Swannanoa 4-H Camp	704-686-3196
Dir.—George Joyner, P.O. Box 175, Swannanoa 28778	

DIRECTORY OF OFFICES

CHANCELLOR

Chancellor, Bruce R. Poulton, A Holladay
Univ. Counsel, A Holladay
Sec. of the Univ., William H. Simpson, A Holladay
Exec. Asst. to the Chancellor, Karen Peterson, A Holladay
Admn. Asst., Thomasene F. Bennett, A Holladay
Director, Institutional Research, Richard D. Howard, 202 Peele

PROVOST AND VICE CHANCELLOR

Provost and Vice Chancellor, Nash N. Winstead, 109 Holladay
Assoc. Provost, Murray S. Downs, 1 Holladay
Assoc. Provost and Affirmative Action Officer/Compliance Officer for Title IX, Lawrence M. Clark, 201 Holladay
Assistant Provost for Academic Computing, Henry E. Schaffer, M2 Hillsborough Bldg.
Academic Skills Program, Dir., Hugh Fuller, 300-D Poe
Admissions, Dean, Anna P. Keller, 112 Peele
Archives, Maurice S. Toler, G-111 Library
Computer Graphics Ctr., Dir., Siamak Khorram, 338 Daniels
Computing Center, Dir., Carl W. Malstrom, M2 Hillsborough Bldg.
Cooperative Education, Dir., William D. Weston, M5 Link Bldg.
D.H. Hill Library, Dir., I.T. Littleton, 1208 Library
International Programs, Coord., J. Lawrence Apple, 209 Daniels
Radiation Protection Office, D. W. Morgan, 214 Clark Lab.

VICE CHANCELLOR FOR EXTENSION AND PUBLIC SERVICE

Vice Chancellor for Extension and Public Service, W. L. Turner, 200 McKimmon
Assoc. Vice Chancellor, Grover J. Andrews, 217 McKimmon
Dir., Con. Educ. & Professional Dev., Kelly R. Crump, 147-I McKimmon
Dir., Summer Sessions, and Asst. Dir., Con. Educ.-Credit Branch, John F. Cudd Jr., 145-C McKimmon
Assoc. Dir., Urban Affairs, Peter Meyer, 289 McKimmon
Dir., McKimmon Center, Denis S. Jackson, 225 McKimmon
Dir., International Trade Center, Thomas R. Brown, 213 McKimmon
Dir., Adult Credit Prog. Dev., Lifelong Educ., Robert K. White, 219 McKimmon

VICE CHANCELLOR FOR RESEARCH

Vice Chancellor, Franklin D. Hart, 103 Holladay
Assoc. Vice Chancellor, Philip B. Carter, 1 Holladay
Assoc. Dean, Howard W. Etzel, 1 Holladay
Dir., Sponsored Programs, Linda F. Jackson, Lower Level, Leazar
Dir., Technology Admin., Becky R. French, 1 Holladay
GC/MS Facility, Carol A. Haney, 1141 Burlington

SCHOOLS AND DEPARTMENTS

ADMISSIONS

Dean, Anna P. Keller, 112 Peele

AGRICULTURE AND LIFE SCIENCES

Dean, D. F. Bateman, 112 Patterson
Business Officer, R. W. Gay Jr., 120 Patterson
Academic Affairs Assoc. Dean and Dir., E. W. Glazener, 115 Patterson
Assoc. Dir., H. B. Craig, 107 Patterson
Acad. Adv. and Placement, R. E. Parries, 11 Patterson
on Assoc. Dean and Dir., C. D. Black, 104 Ricks
Assoc. Dir., R. C. Wells, 106 Ricks
Asst. Dir., Agri. & Special Programs, J. A. Phillips, 211 Ricks
Acting Asst. Dir., Community & Rural Development, Vance E. Hamilton, 302 Ricks
Asst. Dir., County Operations, P.E. Dew, 108 Ricks
Asst. Dir., 4-H, D. R. Proctor, 201 Ricks
Asst. Dir., Home Econ., Martha R. Johnson, 107 Ricks
Asst. Dir., Training, E. J. Boone, 117 Ricks
Ext. Personnel Dev. Spec., Susan Y. Lyday, 109 Ricks
Agricultural Research Serv. Assoc. Dean and Dir., D. F. Bateman, 100-C Patterson
Assoc. Dir., Int'l. Prog., J. L. Apple, 209 Daniels
Assoc. Dir., G. J. Kriz, 100-A Patterson
Asst. Dir., R. E. Cook, 100-D Patterson
Asst. Dir., L. C. Saylor, 2028 Biltmore
Asst. Dir., W. H. Johnson, 100-B Patterson
Asst. Dir., C. E. Stevens, 4700 Hillsborough St.

Research Stations, P. H. Kelley, N. C. Dept. of Agri.
 Agricultural Communications, D. M. Jenkins, 118 Ricks
 Agricultural Institute Dir., H. B. Craig, 107 Patterson
 Biological Sciences Interdepartmental Teaching Program Coordinator, C.F. Lytle, 2717-A Bostian
 Ecology Committee, Chairman, A. G. Wollum, 3131 Williams
 Electron Microscopy Ctr., J. M. Mackenzie Jr., 1223 Gardner
 Laboratory Animal Care, Administrator, Ulysses G. Whitworth, 225 Polk
 Nutrition Program, Coord., J. D. Garlich, 22 Scott
 Physiology Program Coord., J. H. Britt, 231 Polk
 Phytotron (S.E. Plant Env. Lab.), R. J. Downs, 2003 Gardner
 Toxicology Program, Chairman, Ernest Hodgson, 1519 Gardner

Departments

Adult and Community College Education, E. J. Boone, 117 Ricks
 Agricultural Communications, D. M. Jenkins, 118 Ricks
 Educational Media Ctr., 2317 Library Press, Radio, TV, T. M. Byrd, 314 Ricks
 Publications, Thomas W. Knecht, 318 Ricks
 Service Section, G-5 Ricks
 Visual Communications, Bob Gregory, G-1 Ricks
 Animal Science, C. A. Lassiter, 123 Polk
 Extension Animal Husbandry, R. G. Crickenberger, 117 Polk
 Extension Dairy Husbandry, F. N. Knott, 102 Polk
 Extension Swine Husbandry, J. R. Jones, 201 Polk
 Dairy Records Processing Center, Leazar
 Biochemistry, S. B. Tove, 126 Polk
 Biological and Agricultural Engineering, F. J. Hassler, 100 Weaver
 Ext. Biological and Agricultural Engineering, F. J. Humenik, 200 Weaver
 Botany, E. D. Seneca, 2214 Gardner
 Crop Science, B. E. Caldwell, 2207 Williams
 Ext. Crop Science, W. K. Collins, 2212 Williams
 Crop Science Teaching, D.A. Emery, 2210 Williams
 Economics & Business, D. M. Hoover, 201 Patterson
 Assoc. Head, Agri'l. Res. & Teaching, R.K. Perrin, 216 Patterson
 Assoc. Head & Ext. Specialist-in-Charge, C. L. Moore, 212 Patterson
 Asst. Head, Graduate Program, M.B. McElroy, 214 Patterson
 Asst. to Head, 201 Patterson

Entomology, Ronald J. Kuhr, 2301 Gardner
 Ext. Entomology, P. Sterling Southern, 2309 Gardner
 Home Economics, Martha R. Johnson, 107 Ricks
 Foods and Nutrition, Nadine F. Tope, F-4 Ricks Annex
 Human Environment, Judy Mock, F-1 Ricks Annex
 Food Science, David R. Lineback, 100-C Schaub
 Ext. Food Science, N. C. Miller Jr., 129-B Schaub
 4-H and Youth Development, D. R. Proctor, 201 Ricks
 Genetics, William R. Atchley, 3513 Gardner
 Horticultural Science, A. A. De Hertogh, 120 Kilgore
 Grad. Program Coord., F. L. Haynes Jr., 214 Kilgore
 Undergrad. Teaching Coord., W. W. Ballinger, 114 Kilgore
 Ext. Horticulture, 160 Kilgore
 Microbiology, L. W. Parks, 4515-B Gardner
 Graduate Administrator, T. Melton, 4609 Gardner
 Undergraduate Coord., G. H. Luginbuhl, 4608B Gardner
 Plant Pathology, William L. Klarman, 2518 Gardner
 Ext. Plant Pathology, H. E. Duncan, 1410 Gardner
 Poultry Science, James E. Marion, 120 Scott
 Ext. Poultry Science, T. A. Carter, 208 Scott
 Sociology and Anthropology, Luther B. Otto, 301 1911 Bldg.
 Acting Asst. Head, William B. Clifford, 336 1911 Bldg.
 Asst. Head, Mary L. Walek, 306 1911 Bldg.
 Ext. Spec.-in-Charge, Maurice E. Voland, 237 1911 Bldg.
 Grad. Administrator, Robert L. Moxley, 315 1911 Bldg.
 Dir., Social Work, P. Nelson Reid, 334 1911 Bldg.
 Soil Science, R. H. Miller, 2234 Williams
 Ext. Soil Science, J. V. Baird, 3403 Williams
 Teaching Coord., H. J. Kleiss, 2224 Williams
 Statistics, D. L. Solomon, 110 Cox
 Zoology, J. G. Vandenbergh, 2123 Gardner

DESIGN

Dean, Claude E. McKinney, 200-A Brooks
 Assoc. Dean, Robert P. Burns, 222 Brooks
 Asst. Dean, Charles E. Joyner, 200-B Brooks

Departments

Architecture, Robert P. Burns, 222 Brooks
 Design, Charles E. Joyner, 200-B Brooks
 Landscape Architecture, Arthur L. Sullivan, 223 Brooks
 Product Design, V. M. Foote, 220 Brooks
 Visual Design, V. M. Foote, 220 Brooks

EDUCATION

Dean, C. J. Dolce, 208 Poe
Assoc. Dean, H. A. Exum, 208 Poe
Assoc. Dean, R. T. Williams, 208 Poe

Departments

Adult and Community College Education,
E. J. Boone, 117 Ricks
Counselor Education, Norman A. Sprinthall,
520 Poe
Curriculum & Instruction, P. H. Martorella,
402-S Poe
Educational Leadership & Program Evalua-
tion, Raymond G. Taylor, 608P Poe
Mathematics and Science Education, Center
for Researching, Ann C. Howe, 326-S Poe
Occupational Education, J. R. Clary, 502-L
Poe
Psychology, Paul W. Thayer, 640-D Poe

ENGINEERING

Dean, Larry K. Monteith, 102 Page
Assoc. Dean, Grad. Programs, J. K. Ferrell,
224 Page
Assoc. Dean, Res. Programs, T. S. Elleman,
224 Page
Assoc. Dean, Undergrad. Programs, George
F. Bland, 116 Page
Dir. Admn. Services, Jemma S. Rayfield, 101
Page

Departments

Biological and Agricultural Engineering, F.
J. Hassler, 100 Weaver
Chemical Engineering, H. B. Hopfenberg,
113 Riddick
Civil Engineering, P. Z. Zia, 208 Mann
Electrical and Computer Engineering, N. A.
Masnari, 232 Daniels
Industrial Engineering, Thom J. Hodgson,
328 Riddick
Materials Engineering, John J. Hren, 229
Riddick
Mechanical and Aerospace Engineering,
John A. Bailey, 3211 Broughton
Nuclear Engineering, Paul J. Turinsky,
1110-B Burlington

Other Sections

Academic Affairs, Hubert Winston, 115 Page
Admissions & Transfers, Robert M. Turner,
115 Page
Communications & Signal Processing, Cen-
ter for, Sirus Chitsaz, 320 Daniels
Continuing Services, Robert M. Turner, 115
Page
Cooperative Engineering Education Pro-
gram, William T. Holloman, 115 Page
Electric Power Research Center, John J.
Grainger, 400-B Daniels
Engineering Extension Education, D. E.
Harrell, 203-A Page
Engineering Operations and Extradepart-
mental Programs, F. M. Richardson, 116
Page

Engineering Research Services Division,
T. S. Elleman, 224 Page
Furniture Manufacturing & Management
Program, C. Thomas Culbreth, 341 Rid-
dick
Industrial Extension & Applied Research,
Thomas W. Stephenson, 215-C Page
Integrated Manufacturing Systems Engr.
Inst., Carl F. Zorowski, 2332 Broughton
Nuclear Reactor Program, Bernard W.
Wehring, 2117 Burlington
Operations Research Program, S. E.
Elmaghraby, 322 Riddick
Sound & Vibrations, Center for, Richard F.
Keltie, 2229 Broughton

FOREST RESOURCES

Dean, Eric L. Ellwood, 2028-H Biltmore
Assoc. Dean, Academic Affairs, L. C. Saylor,
2028-C Biltmore
Assoc. Dean, Res., Ellis B. Cowling, 2028-F
Biltmore

Departments

Forestry, Arthur W. Cooper, 2018-E Bilt-
more
Forest Resources Extension, Michael P. Levi,
3036-D Biltmore
Recreation Resources Administration, M.
Roger Warren, 4008-C Biltmore
Wood and Paper Science, Richard J. Thomas,
1022-N Biltmore
Pulp and Paper Science and Technology,
R. G. Hitchings, 2106 Robertson
Wood Products Lab., R. C. Gilmore,
Hodges Lab

HUMANITIES AND SOCIAL SCIENCES

Dean, W. B. Toole III, 106 Link Bldg.
Assoc. Dean, Academic Affairs, M. Mohan
Sawhney, 106 Link Bldg.
Assoc. Dean, Planning & Mgmt., G. David
Garson, M-7 Link Bldg.
Asst. Dean, Res. & Grad. Prog., Edith D.
Sylla, 106 Link Bldg.
Asst. to the Dean for Undergrad.
Academic Affairs, W. Curtis Fitzgerald,
M-9 Link Bldg.
North Carolina Japan Center, Dir., John
Sylvester Jr., 5 Rosemary St.

Departments

Economics and Business, Dale M. Hoover,
201 Patterson
English, John E. Bassett, 131-B Tompkins
Foreign Languages and Literatures, Joan H.
Stewart, 117 1911 Bldg.
History, Alexander J. De Grand, 158 Harrel-
son
Philosophy and Religion, Robert S. Bryan,
100 Winston
Physical Education, Richard Lauffer, 2002
Carmichael
Political Science and Public Administration,
Marvin S. Soroos, 215 Link Bldg.

Sociology and Anthropology, Luther B. Otto,
301 1911 Bldg.
Speech-Communication, William J. Jordan,
206 Winston

PHYSICAL AND MATHEMATICAL SCIENCES

Dean, Garrett Briggs, 118 Cox
Assoc. Dean, Academic Affairs, Robert D.
Bereman, 122-A Cox
Assoc. Dean, Research, Leslie B. Sims, 113
Cox
Afro-American Stu. Coord./Coop. Educ.
Coord., Wandra P. Hill, 121 Cox

Departments

Biochemistry, Sam B. Tove, 126 Polk
Chemistry, Kenneth W. Hanck, 208-A Dab-
ney
Computer Science, Robert E. Funderlic, 122
Daniels
Marine, Earth & Atmospheric Sciences,
Henry S. Brown, 216 Withers
Mathematics, Ernest E. Burniston, 360-A
Harrelson
Physics, Richard R. Patty, 105 Cox
Statistics, Daniel L. Solomon, 110-A Cox

TEXTILES

Dean, D. S. Hamby, 101 Nelson
Assoc. Dean, P. L. Grady, 107 Nelson
Assoc. Dean, Academic Programs, M. H.
Mohamed, 126 Nelson
Assoc. Dean, Textile Research & Graduate
Studies, W. K. Walsh, 107-B Nelson
Assoc. Dir., Textiles Extension, L. T.
Lassiter, B-22 Nelson
Asst. to the Dean for Student Serv. and
Placement Dir., C. L. Barton, 120 Nelson
Textiles Library, Barbara Best-Nichols, 112
Nelson

Departments

Textile Chemistry, C. D. Livengood, 115
Clark Labs
Textile Engineering and Science, S. P.
Hersh, 102 Nelson
Textile Management and Technology, G. A.
Berkstresser, 142 Nelson

VETERINARY MEDICINE

Dean, Terrence M. Curtin, 4700 Hills-
borough St.
Assoc. Dean and Dir., Academic Affairs,
Donald R. Howard, 4700 Hillsborough St.
Assoc. Dean and Dir., Research & Graduate
Studies, C. Edward Stevens, 4700 Hills-
borough St.
Assoc. Dean and Dir., Veterinary Medical
Services, William M. Adams, 4700 Hills-
borough St.
Asst. to the Dean and Dir., Business and
Finance, John W. Green, 4700 Hillsbor-
ough St..
Laboratory Animal Resources, Charles W.
McPherson, 4700 Hillsborough St.

Librarian, Thea J. Fischer, 4700 Hillsbor-
ough St.
Veterinary Equine Research Center, Clifton
McLean, Southern Pines
Veterinary Serv., Don Brazeal, 4700 Hills-
borough St.

Departments

Anatomy, Physiological Sciences and Radiol-
ogy, Arthur L. Aronson, 4700 Hillsborough
St.
Companion Animal and Special Species Med-
icine, Stephen W. Crane, 4700 Hillsbor-
ough St.
Food Animal and Equine Medicine, Wayne
D. Oxender, 4700 Hillsborough St.
Microbiology, Pathology and Parasitology,
Leroy Coggins, 4700 Hillsborough St.

GRADUATE SCHOOL

Interim Dean, Debra Stewart, 103 Peele
Assoc. Dean, R. E. Fornes, 203 Peele
Assoc. Dean, A. M. Witherspoon, 108 Peele

DIVISIONS, SERVICES

ACADEMIC SKILLS PROGRAM

Director, Hugh Fuller, 528-A Poe

ADMINISTRATIVE COMPUTING SERVICES

Director, H. Leo Buckmaster, B-21 Hills-
borough Bldg.

ADMISSIONS

Dean, Anna P. Keller, 112 Peele

ALUMNI RELATIONS

Director, B. R. Younts, Alumni
Assoc. Dir., Douglas B. Featherstone,
Alumni
Asst. Dir., B. Bryant Allen, Alumni
Editor, Elizabeth Coffey, Alumni

ATHLETICS

Director, James T. Valvano, Case Athl.
Center
Senior Assoc. Dir., Frank Weedon, Case Athl.
Center
Assoc. Dir., Nora Lynn Finch, Case Athl.
Center
Assoc. Dir., Kevin O'Connell, Case Athl.
Center
Asst. Dir., Howard Hink, Case Athl. Center
Asst. Dir., Bob Robinson, Case Athl. Center
Asst. Dir., Ray Tanner, Case Athl. Center
Box Office Mgr., Bessie Steele, 103 Reynolds
Coliseum

Business Mgr., Richard Farrell, 103 Reynolds Coliseum
 Sports Information Dir., Ed Seaman, Case Athl. Center
 Wolfpack Club Dir., Charlie Bryant, College Inn
 Baseball, Sam Esposito, Case Athl. Center
 Basketball, Men's, Jim Valvano, Case Athl. Center
 Basketball, Women's, Kay Yow, Case Athl. Center
 Cross Country, Men's & Women's, Rollie Geiger, Weisiger-Brown Athl. Fac.
 Fencing, Men's & Women's, David Porter, Case Athl. Center
 Football, Dick Sheridan, Weisiger-Brown Athl. Fac.
 Golf, Men's, Richard Sykes, Case Athl. Ctr.
 Gymnastics, Women's, Mark Stevenson, Case Athl. Center
 Rifle, Men's & Women's, John Reynolds
 Soccer, Men's, George Tarantini, Case Athl. Center
 Soccer, Women's, & Coord. of Soccer, Larry Goss, Case Athl. Ctr.
 Swimming, Men's & Women's, Don Easterling, Case Athl. Center
 Tennis, Men's & Women's, Crawford Henry, 122 Reynolds Coliseum
 Track, Men's & Women's, Rollie Geiger, Weisiger-Brown Athl. Fac.
 Volleyball, Judy Martino, Case Athl. Center
 Wrestling, Bob Guzzo, Weisiger-Brown Athl. Fac.

COLISEUM, WILLIAM NEAL REYNOLDS

Dir., James T. Valvano, Case Athl. Center
 Box Office Mgr., Bessie Steele, 103 Reynolds Coliseum
 Concessions Dir., 119 Reynolds Coliseum

COMPUTER GRAPHICS CENTER

Dir., Siamak Khorram, 338 Daniels

COMPUTING CENTER

Dir., Carl W. Malstrom, M-2 Hillsborough Bldg.

COOPERATIVE EDUCATION

Dir., William D. Weston, M5 Link Bldg.

CROP IMPROVEMENT ASSOCIATION, N. C.

Dir., F. W. McLaughlin, 3709 Hillsborough St.

DEVELOPMENT

Vice Chancellor, John T. Kanipe Jr., 12 Holladay

Exec. Asst. to the Vice Chancellor, Dennis A. Taylor, 12 Holladay
 Univ. Dev. Officer—Arts, Univ. Stu. Ctr.
 Univ. Dev. Officer—Deferred Giving, Joseph O. Bull, 20 Enterprise St.
 Univ. Dev. Officer—Education, M. Lynn Lyle, 732 Poe
 Univ. Dev. Officer—Engineering, James R. Pearson, 102 Page
 Univ. Dev. Officer—Forest Resources, 1 Holladay
 Univ. Dev. Officer—PAMS, Cynthia J. Ball, 20 Enterprise St.
 Univ. Dev. Officer—Records & Research, Julia G. May, 2 Holladay
 Univ. Dev. Officer—SALS, 12 Holladay
 Univ. Dev. Officer—SHASS, Design, 7 Holladay
 Univ. Dev. Officer—SVM, 1 Holladay

FINANCE AND BUSINESS

Vice Chancellor for Fin. and Bus., George Worsley, B Holladay
 Assoc. Vice Chancellor for Fin. and Bus., Lauren J. Brisky, B Holladay
 Asst. Vice Chancellor for Business, Charles D. Leffler, 203 Holladay
 Asst. Vice Chancellor for Finance, Darryl W. Bierly, B Holladay
 Accounting Director, Ernest G. Murphrey, 201 Admn. Serv. Ctr.
 General Accounting, James C. Langfahl, 205 Admn. Serv. Ctr.
 Fund Accounting, Lou F. Rosendahl, 211 Admn. Serv. Ctr.
 Accounts Payable, Deborah P. Lane, 206 Admn. Serv. Ctr.
 Special Accounting Services, Billy R. Bunn, 204 Admn. Serv. Ctr.
 Capital Assets Accounting, John G. Hubbard, 202 Admn. Serv. Ctr.
 Administrative Computing Services
 Dir., H. Leo Buckmaster, B-21 Hillsborough Bldg.
 Fin. and Bus. Unit, Bryant Deaton, 1212 Blue Ridge Rd.
 Contract Services Unit, Leazar Lower Level
 Data Base, Ronald Melbourne, B-21 Hillsborough Bldg.
 Data Processing, Dennis Norris, 11 Peele
 Information Center, Jeff Hunter, 14 Peele
 Student Affairs Unit, Allen Brady, B-21 Hillsborough Bldg.
 Systems, John Hamlet, B-21 Hillsborough Bldg.
 Auxiliary Services
 Asst. Vice Chancellor for Business, Charles D. Leffler, 203 Holladay
 Business Serv. Mgr., Nancy F. Moxley, 203 Holladay
 Laundry, Mgr., Lawrence W. Gower, Laundry

Students Supply Stores

Director, G. Robert Armstrong, SSS
Assoc. Dir., Douglas Small Jr., SSS
Mdse. & Mktg. Div. Mgr., Richard Hayes, SSS
Book Div. Mgr., Thomas Setzer, SSS
Book Div. Asst. Mgr., Don Bonnewell, SSS
Computer Sales, Clarence Morgan, SSS
Supplies, Ed York, SSS
Gen. Mdse., Edith Purvis, SSS
Book Sales Floor Supv., Raymond Wanchock, SSS
Pers. Mgr., Aline Roberson, SSS
Accounting Supv., Mary Sigmon, SSS
Operations Div. Mgr., Jim Garrison, SSS
North Campus Bookshop Supv., Ada Braswell, Erdahl-Cloyd Annex
Telecommunications, Dir., Miriam Tripp, Admn. Serv. Ctr.
Office Mgr., Olive Stone, Admn. Serv. Ctr.
University Graphics, Mgr., Scott G. Bertness, Univ. Graphics
Production Mgr., Glenn G. Sanderson, Univ. Graphics
Budgets, Dir., Roy L. Holley, 206 Holladay
Campus Planning and Construction Director/Univ. Architect, Edwin F. Harris Jr., 219 Oberlin Rd.
Univ. Construction Mgr., John G. Fields, 219 Oberlin Rd.
Univ. Landscape Architect, Sallie Ricks, 219 Oberlin Rd.
Consulting Architect, W. Huntley McKinnon, 219 Oberlin Rd.
Consulting Architect, Michael L. Rickenbaker, 219 Oberlin Rd.
Admn. Asst., Betty Z. Dunn, 219 Oberlin Rd.

Central Stores

Store Manager, Judy Willis, Central Stores
Sales, Marvin Gibbs, Central Stores
Business Office, Joyce Stephens, Central Stores
Central Receiving, Ray Lawhorn, Central Stores
Gas Cylinder Mgmt., Sherwood Pendergraft, Central Stores
Surplus Property, Jessie Williams, Central Stores
Contracts and Grants Dir., Earl N. Pulliam, Leazar Lower Level
Foundations Accounting & Investments Dir., Paulette E. Jervay, B Holladay
Human Resources

Director, Alice R. Miller, Admn. Serv. Ctr.
Assoc. Dir., Employment Services, John C. Brooks, Admn. Serv. Ctr.
Assoc. Dir., Pos. Mgmt. & Sal. Admin., Sam Connally, Admn. Serv. Ctr.
Asst. Dir., Training & Development, Susan Babcock, Admn. Serv. Ctr.

Manager, Pos. Mgmt., Kathy Heeter, Admn. Serv. Ctr.

Manager, Sal. Admin., E. Ann Peters, Admn. Serv. Ctr.

Manager, Univ. Temporary Serv., Kathy Pendergraft, Admn. Serv. Ctr.

Internal Audit Div., Mgr., Preston Bethea Jr., B Holladay

Payroll and Benefits

Acting Dir., Jill Worthington, Admn. Serv. Ctr.

Asst. to Dir., Andre Carson, Admn. Serv. Ctr.

Benefits Mgr., Fran S. Weston, Admn. Serv. Ctr.

Personnel Services (See Human Resources)

Physical Plant

Director, Charles C. Braswell, 100 Morris

Asst. Dir., Engineering, Carl D. Fulp, 10 Riddick Stadium

Asst. Dir., Gen. Serv., Gary Y. Coates, 103 Morris

Asst. Dir., Oper., Lawrence B. Bradley, 109 Morris

Asst. Dir., Vet. Serv., W. D. Brazeal, 4700 Hillsborough St.

Asst. to Dir., Page Billingsley, 100 Morris

Admn. Serv. Supt., George F. Lynch, 200 Morris

Auto. Serv. Supt., F. Randy Bowen, Motor Pool Bldg.

Budget, Edward B. Phillips, 209 Morris

Building Serv. Supt., Berry Dunston Jr., 4 Park Shops

Const. & Estimating Supt., Morris

Design Serv. Supt., Donald A. Iddings, 7 Morris

Elect. Syst. Supt., 16 Morris

Landscape Serv. Supt., Frank B. Bynum Jr., Land. Serv. Bldg.

Mgmt. Engr., Richard Hardee, 109 Morris

Mech. Syst. Supt., Lewis M. Strong, 17 Morris

Motor Pool, Gayle Franks, Motor Pool Bldg.

Personnel, Bobby F. Holloway, 204 Morris

Steam Utility Supt., C. Tommy Barefoot, 13 Morris

Trade Serv. Supt., Roy Munden, 3 Park Shops

Work Center/Scheduling Officer, Jennifer F. Burdick, 128 Morris

Public Safety, Division of

Dir., Chief, James W. Cunningham, Field House

Deputy Dir., Admin., Capt. Miles Heckendorn III, Field House

Deputy Dir., Life Safety Serv., Bruce L. Macdonald, Field House

Deputy Dir., Patrol Operations, Capt. Larry D. Liles, Field House

Auxiliary Functions Coord., E. Susan Edwards, Field House

Auxiliary Functions Sgt., Sgt. Joellen M. Nader, Field House
 Support Serv. Coord., Lt. Terry Abney, Field House
 Support Serv. Sgt., Sgt. C. Renee Wood, Field House
 Crime Prevention Office, Ptl. Penelope H. McLeod, Field House
 Investigations Coord., Det./Sgt. Laura K. Reynolds, Field House
 Hazardous Waste Spec., Larry A. Chako, Field House
 Health & Safety Off., Denise S. Taylor, Field House
 Sr. Life Safety Inspector, Floyd S. Sellers, Field House
 Shift Commanders
 Sgt. Lisa D. Biggs, Field House
 Sgt. Teresa Crocker, Field House
 Sgt. Robyn G. Lee, Field House
 Sgt. Wesley J. Shattuck, Field House
 Purchasing
 Dir., Ed Sikoski, 214 Alumni
 Systems Coord., Linda Allred, 217 Alumni
 Risk & Insurance Mgt., Anne Hitchcock, 217-B Alumni
 Purchasing Mgr., Fleton Tilley, 200 Alumni
 Admn. Mgr., Kathryn Suggs, 216 Alumni
 Data Control Supv., Judy Shepherd, 216 Alumni
 Purchasing Off., Bob Knoll, 201 Alumni
 Purchasing Off., Annette Wahab, 204 Alumni
 Purchasing Off., Matthew Mills, 217 Alumni
 Purchasing Off., Richard Williams, 206 Alumni
 Purchasing Off., Mary Sanders, 210 Alumni
 Interior Designer, Briget Pollock, 220 Alumni
 Student Accounts, Dir., W. R. Styons, 2 Peele
 Transportation
 Dir., Janis Y. Rhodes, 139 Admn. Serv. Ctr.
 Parking Services, 139 Admn. Serv. Ctr.
 Visitor Parking, Information Center
 University Cashier, Jerry LaGarde, 2 Peele
 University Temporary Service
 Manager, Kathy Pendergraft, Admn. Serv. Ctr.

FOUNDATION SEED PRODUCERS INC., N. C.
 Mgr., M. W. Baker, 4025 Beryl Rd.

INFORMATION SERVICES
 Dir., Lucy Coulbourn, 219 Oberlin Rd.
 Asst. Dir., News, Rosalind Reid, 219 Oberlin Rd.
 Asst. Dir., Electronic Media, Robert S. Cairns III, 219 Oberlin Rd.

INTERNATIONAL PROGRAMS
 Coord., J. Lawrence Apple, 209 Daniels

INTERNATIONAL TRADE CENTER
 Dir., Thomas R. Brown, 213 McKimmon

LIBRARY, D. H. HILL
 Dir., I. T. Littleton, 1208 Library
 Asst. Dir., General Serv., D. S. Keener, 1318 Library
 Asst. Dir., Reference Serv., W. C. Lowe, 1128 Library
 Asst. Dir., Technical Serv., Nell Waltner, 1137 Library
 Collection Dev.-Acquisitions, Margaret Hunt, Third Floor, East Wing
 Binding, Phyllis Garris, G-116 Library
 Circulation Desk, Bonnie Baker, 1212 Library
 Design Library, Caroline Carlton, 209 Brooks
 Forest Resources Library, John Abbott, 4012 Biltmore
 General Serv. Libr., Linda P. Fuller, 1209 Library
 Interlibrary Center, Ann Baker Ward, 1133 Library
 Library Systems, W. C. Horner, 2312 Library
 Media Center Office, Pam Fleming, 2305 Library
 Monographic Cataloging, Walter M. High, 1121 Library
 Periodicals Service Center, Elizabeth Chiego, G-114 Library
 Photocopy, Sharon Wells, 1222 Library
 Reference Information, W. R. Pollard, 1131 Library
 Reserve Room, Frieda Stamper, 1330 Library
 Serials, G. W. Houser, G112-114 Library
 Technical Info. Center, M. R. Simpson, 1129 Library
 Textiles Library, Barbara Best-Nichols, 112 Nelson
 Tobacco Literature Service, Pamela Puryear, 2314 Library
 U.S. Documents, Jean Porter, 2108 Library
 Veterinary Medicine, Thea Fisher, 4700 Hillsborough St.

LIFELONG EDUCATION, DIVISION FOR
 Dir., Con. Educ. & Professional Dev., Kelly R. Crump, 147-I McKimmon
 Assoc. Dir., Denis S. Jackson, 225 McKimmon
 Asst. Dir., Credit Branch, John F. Cudd Jr., 145-C McKimmon
 Asst. Dir., Con. Educ. & Professional Dev., Rosemary M. Jones, 147-H McKimmon

MCKIMMON CENTER

Dir., Denis S. Jackson, 225 McKimmon
Assoc. Dir., Mary Frances Hester, 202 McKimmon
Reservationist, Diane Outlaw, 225 McKimmon
Facilities Coord., Jane E. Hodge, 139 McKimmon

RADIATION PROTECTION OFFICE

Radiation Protection Officer, D. W. Morgan, 214 Clark Labs
Assoc. Radiation Protection Officer, D. B. Beasey, 214 Clark Labs

STUDENT AFFAIRS, DIVISION OF

Vice Chancellor, Thomas H. Stafford Jr., 101 Holladay
Asst. to Vice Chancellor for Stu. Affairs for Univ. Dining, Arthur L. White, 4112 Univ. Stu. Ctr.
Assoc. Vice Chancellor, Henry Bowers, 3111 Univ. Stu. Ctr.
Assoc. Vice Chancellor, Ronald C. Butler, 205 Peele
Assoc. Vice Chancellor, Gerald G. Hawkins, 210 Harris
Assoc. Vice Chancellor, Charles A. Haywood, 209 Harris
Air Force ROTC
Col. Cleveland Simpson, 145 Reynolds Coliseum
Army ROTC
LTC Howard K. Fisher Jr., 160 Reynolds Coliseum
Art
Curator, Charlotte V. Brown, 4110 Univ. Stu. Ctr.
Career Planning & Placement Ctr.
Dir., Walter B. Jones, 28 Dabney
Counseling
Dir., M. Lee Salter, 200 Harris
Craft Center
Dir., C. W. Weiser, Thompson Bldg.
Financial Aid
Dir., Carl O. Eycke, 213 Peele
Housing & Residence Life
Dir., Cynthia Bonner, 208 Harris
International Student Office
Dir., Donald R. Roberts, 1201 Univ. Stu. Ctr.
Merit Awards
Coord., Patricia J. Lee, 205-A Peele
Music
Dir., J. Perry Watson, 203 Price Music Ctr.
Navy ROTC
Lt. Edward Henkler, 104 Reynolds Coliseum
Registration and Records
Registrar, James H. Bundy, 100 Harris
Stewart Theatre
Dir., Vicki L. Marmarose, Univ. Stu. Ctr.

Student Development

Dir., Evelyn Reiman, 216 Harris
Student Health Service
Dir., Jerry Barker, Clark Infirmary
Study Abroad
Dir., Cynthia F. Chalou, Alexander Hall
Thompson Theatre
Dir., Charles A. Martin, Thompson Bldg.
University Dining
Asst. to Vice Chan. for Univ. Dining, Arthur L. White, 3805 Beryl Rd.
University Student Center
Dir., Henry Bowers, 3111 Univ. Stu. Ctr.
Assoc. Dir., Lee R. McDonald, Univ. Stu. Ctr.
Food Service Dir., David Rittenhouse, Univ. Stu. Ctr.
Program Office, 3114 Univ. Stu. Ctr.
Reservations & Catering, Lucie R. Hunter, Univ. Stu. Ctr.
Student Address & Info., Univ. Stu. Ctr.
Upward Bound Program
Dir., Cynthia J. Harris, 205 Peele

SUMMER SESSIONS

Dir., J. F. Cudd, 145-C McKimmon

TELEVISION (UNC CENTER FOR PUBLIC TELEVISION)

Production Coord., Richard Snavey, 211-A Television Ctr.

UNIVERSITY RELATIONS

Director, Albert B. Lanier Jr., 12 Holladay
Asst. Dir., Beth A. McGee, 10 Holladay
Dir., Information Serv., Lucy Coulbourn, 219 Oberlin Rd.
Coord., Spec. Proj., Frances M. Milks, 10 Holladay
Univ. Comm. Coord., Owen Weddle, 10 Holladay
Asst. Vice Chancellor, Comm., Hardy D. Berry, 9A Holladay
Coord., Emerging Issues Forum, Betty Owen, 10 Holladay
Admn. Asst., Patricia N. McLean, 12 Holladay

UNIVERSITY STUDIES, Division of

Head, John M. Riddle, 144 Harrelson

URBAN AFFAIRS AND COMMUNITY SERVICES, CENTER FOR

Dir., Grover J. Andrews, 217 McKimmon
Assoc. Dir., Peter Meyer, 289 McKimmon

VISUAL COMMUNICATIONS

Head, Bob Gregory, G-1 Ricks

WATER RESOURCES RESEARCH INSTITUTE

Dir., David H. Moreau, 225 Page





FACULTY AND STAFF

Name, Title, Department and Address	Office Phone	Resid. Phone
A		
Abbate, Angelo, (Charlotte), Assoc. Prof., Design .....2203	682-0945	
215A Brooks, Box 7701; 209 W. Markham Ave., Durham 27701		
Abbott, John P., Head, For. For. Resou. Libr. ....3513		
4012 Biltmore, Box 8001		
Abbott, Lisa T., Librn. Docu. ....3280		
Library, Box 7111		
Abdullah, Wanda C., Asst. Dir., Fin. Aid, Stu. Aff. ....2421	832-0057	
213 Peele, Box 7302; 2325 Quartz St. 27610		
Abell, Gail C., (Stan) Sec., Mat. Engr. ....2377	848-6793	
229 Riddick, Box. 7907; 1620 Brookrun Dr., 27614		
Abney, Terry, Lt., Public Safety ....2156		
Field House, Box 7220		
Abrams, Dr. C. Frank, Jr., (Judy), Prof., Bio. & Agri'l. Engr. ....3101	851-5883	
118 Weaver, Box 7625; 4700 Joseph Michael Ct., 27606		
Acedo, Juan R., Res. Tech., Hort. Sci. ....3166	544-5857	
257 Kilgore, Box 7609; 5501 McCormick Rd., Durham, 27713		
Adams, Anthony A., (Shelvy), Hskp. Asst., Phys. Plant ....3323	552-7455	
Park Shops, Box 7219; 115-E Baytree Apts., Fuquay, 27526		
Adams, Arthur R., Agri'l. Res. Tech., Crop Sci. ....2827	894-4256	
3709 Hillsborough St., Box 8604; Rt. 4, Box 48, Benson 27504		
Adams, Belinda M., Clk.-Typ., Lifelong Educ. ....2265	894-5304	
145 McKimmon, Box 7401; Rt. 1, Box 219-B, Benson, 27504		
Adams, Catherine M., Acct. Clk., Univ. Dining ....7012		
3805 Beryl Rd., Box 7307; 831-O Suffolk Blvd., 27603		
Adams, Clayton W., Elect. Tech., Text. ....3074	266-3472	
B-34 Nelson, Box 8301; Rt. 12, Box 17, 27610		
Adams, Dr. David A., (Pat), Assoc. Prof., Univ. Stud., For. ....2479, 2891	847-1915	
139 Harrelson & 1022-F Biltmore, Box 7107, 8002; 7521 Haymarket Ln., 27609		
Adams, Dennis E., (Bonnie), Agri'l. Res. Tech., Hort. Sci. ....3346	639-4732	
68 Kilgore, Box 7609; 8080 Mt. Pleasant Rd., Willow Springs, 27592		
Adams, James K., Elect. Phys. Plant ....3080	772-3901	
Armory Shop, Box 7219; 2930 Fairway Dr., 27603		
Adams, John H., Boiler Oper., Phys. Plant ....2184	834-0849	
Heating Plant, Box 7219; 2906 Everette Ave., 27607		
Adams, Vickie B., Public Prog. Coord., SVM ....829-4200	782-4374	
4700 Hillsborough St., Box 8401; 3009 Farrior Rd., 27607		
Adams, Dr. William M., (Lu), Assoc. Dean & Dir., Vet. Med. Serv., SVM ...829-4211	851-6198	
4700 Hillsborough St., Box 8401; 1808 Baker Rd., 27607		
Adcock, Michael E., (Bess), Res. Tech., Bio. & Agri'l. Engr. ....2675	693-5484	
200-B Weaver, Box 7625; Rt. 1, Box 41-D, Oxford 27565		
Adelhelm, Robert P., (Brenda), Maj., USMC, Instr., Naval Sci. ....2907, 2908		
104, 304 Reynolds Coliseum, Box 7310;		
Adkins, Craig R., Agri'l. Res. Tech., Plant Path. ....2735	782-5766	
2605 Gardner, Box 7616; 3972-A Tara Dr., 27609		
Adler, Juanita J., Clk., Cust. Serv., Univ. Graphics ....2131		
Sullivan Dr., Box 7226; Rt. 2, Box 341-A, Zebulon, 27597		
Adler, Dr. William, Asst. Prof. of Rel., Phil. & Rel. ....3214	821-4060	
110 Winston, Box 8103; 116 1/2 Hawthorne Rd., 27605		
Afewerk, Yohannes, Agri'l. Res. Asst., Ani. Sci. ....2637	851-4346	
3720 Lake Wheeler Rd., Unit 2, Box 7621; 1131 Crab Orchid Dr., Apt. 1A, 27606		
Afify, Dr. Elsayed M., Prof., Mech. & Aero. Engr. ....3024	787-3121	
3177 Broughton, Box 7910; 705 Glen Eden Dr., 27612		
Agrawal, Dr. Dharma P., (Purnima), Prof., Elec. & Comp. Engr. ....2336	787-8503	
335A Daniels, Box 7911; 2500 Catalina Ct., 27606		
Ahlstrom, Nancy W., (Kenneth), Admn. Sec., Mat. Engr. ....2377	787-8417	
229 Riddick, Box 7907; 5323 Collingswood Dr., 27609		

Name, Title, Department and Address	Office Phone	Resid. Phone
Ahmad, Dr. Shuaib H., (Serpil), Assoc. Prof., Civil Engr. 316 Mann, Box 7908; 6213 Bramblewood 27607	2331	847-3261
Ajmera, Bhavana A., (Atul), Sec., Wood & Paper Sci. 1022 Biltmore, Box 8005; 2217 B Gorman St., 27606	3181	859-0463
Alam, Dr. Jawed, Res. Assoc., Gen. 3612 Gardner, Box 7614; 3700A Greenleaf St., 27606	2294	821-1482
Alberg, Evelyn E., Admin. Mgr., Dean's Off., Sch. of Educ. 208 Poe, Box 7801; 1826 White Oak Rd., 27608	2231	829-9534
Albright, Richard T., Elect., Phys. Plant Armory Shop, Box 7219; 310-A Bargate Dr., Cary, 27511	3080	469-5311
Alchediak, James, (Deborah Shandles), Lect., Speech-Comm. 2316-B Library, Box 8104; 1833 White Oak Rd., 27608	3303	833-8079
Alder, Dr. Ruth A., Assoc. Prof., For. Lang. 119 1911 Bldg., Box 8106; 501 Carriage Ln., Cary 27511	2475	469-1036
Aldridge, Muriel, Sec., Home Ec. F-2 Ricks Annex, Box 7605	2770	
Aldridge, Virginia W., (Charles), Admn. Asst., Engl. 131-C Tompkins, Box 8105; 4907 Stonehill Dr., 27609	2462	787-5558
Alegre, Dr. Julio C., (Nieves), Vis. Asst. Prof., Soil Sci.	2838	
Alexander, Beverly, Lutheran Chaplain, Coop. Campus Min. 2723 Clark Ave.; 1213 Courtland Dr., 27604	828-1433	755-1579
Alexander, Jeffrey M., Comp. Prog., Comp. Ctr. 106 Hillsborough Bldg., Box 7109;	2517	821-3983
Alexander, Dr. S. Thomas, Asst. Prof., Elec. & Comp. Engr. 314 Daniels, Box 7911; 505 Merrie Rd., 27606	2336	
Alexander, Dr. Winsor E., (Mary), Prof., Elec. & Comp. Engr. 334 Daniels, Box 7911; 7017 Valley Dr., 27612	2336	848-0595
Alford, Anne M., Sec., Hort. Sci. Ext. 162-A Kilgore, Box 7609	3322	
Alford, Bobby W., Agri'l. Res. Asst., Univ. Res. Unit 2 3720 Lake Wheeler Rd., Box 7601; Rt. 3, Box 292, Wendell 27591	2759	365-7888
Alford, Dawn L., (Leslie G.), Data Entry Oper., Comp. Ctr. 109B Hillsborough Bldg., Box 7109; 111 Satterwhite Dr., Knightdale 27545	2517	266-0449
Alford, George, Wrk. Phys. Plant Sullivan Dr., Box 7219; 208 E. Stalling St., Clayton, 27520	3408	553-6344
Allen, Adea L., Clk.-Typ., Phil. & Rel. 100 Winston, Box 8103; 2304 Apt. A, Myron Dr., 27607	3214	781-9383
Allen, Alexander V., (Marian), Ext. Spec. Emer., Ani. Sci. 1314 Rand Dr., 27608		787-5323
Allen, B. Bryant, Asst. Dir., Alumni Rel. Alumni Bldg., Box 7503; 1400-B Steinbeck Dr., 27609	3375	872-7760
Allen, Dr. Brenda F., Spec., Leadership, Home Ec. Agri'l. Ext. Serv. F-5 Ricks Annex, Box 7605	2770	787-3902
Allen, Carol S., (Mike), Clk.-Typ., Comp. Sci. 120 Daniels, Box 8206; 5320 Pamela Dr., 27603	7847	772-2813
Allen, Cindy S., (Willie), Prog. Asst., Con. Educ. 147 McKimmon, Box 7401; Rt. 3, Box 115C, Fuquay-Varina, 27526	2261	552-9580
Allen, Dr. Claudia G., (Steven), Lect., Ec. & Bus. 211-A Hillsborough Bldg., Box 8110; 1206 Huntsman Dr., Durham, 27713	3884	
Allen, Deborah L., Clk.-Typ. Zool. 2113 Gardner, Box 7617; Masengill MHP 21, Clayton, 27520	2741	553-6017
Allen, Dennis G., (Lakie), Res. Asst., Ec. & Bus. 210-A Patterson,	3951	
Allen, Diane L., (Dean), Cash., Univ. Dining Erdahl-Cloyd Annex, Box 7307; 510 Hilltop Ave., Garner, 27529	3270	
Allen, Donnie G., Jr., (Doris), Agri'l. Res. Asst., Poul. Sci. Dearstyne Avian Res. Ctr. Box 7608; 8201 Middleton Rd., Garner, 27529	2649	772-5094
Allen, Edith W., Clk.-Typ., Dean's Off., Hum. & Soc. Sci. 106 Link Bldg., Box 8101; 2412 Greenway Ave., 27608	2467	787-1267
Allen, Dr. H. Lee, (Susan L.), Asst. Prof. & Dir., NCSFNC, For. 1025 Biltmore, Box 8002; 225 Winding Ridge Rd., 27606	3500	362-4582
Allen, Harvey L., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 305 Gatewood Dr., 27529	3323	833-5343

Name, Title, Department and Address	Office Phone	Resid. Phone
Allen, Henry, Hskp. Asst., Phys. Plant Park Shops, Box 7219; P.O. Box 749, Spring Hope, 27882	3323	478-5292
Allen, Hunt M., (Ann), Ext. Spec., Text. Ext. B-7 Nelson, Box 8301; 412-A Glaveston Ct., Cary 27511	3761	481-0104
Allen, Janet S., (John), Rad. Tech., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; Rt. 5, Box 202, Apex 27502	829-4200	
Allen, Jennifer T., (Craig), Clk.-Typ. Crop Sci. 3709 Hillsborough St., Box 8604; Rt. 3, Box 376, Benson 27504	2851	894-8636
Allen, Richard E., (Brenda), Elect., Phys. Plant Armory Shop Box 7219; 809 Johnston Union Rd. Clayton, 27520	3080	553-6837
Allen, Ruth B., (Jerry), Clk.-Typ., For. Resou. 2028 Biltmore, Box 8001; 301 S. Mineral Springs Rd., Durham 27703	2883	596-7985
Allen, Dr. Steven G. (Linda), Asst. Prof., Ec. & Bus. 219D Hillsborough Bldg., Box 8110; 1209 Chaney Rd., 27606	3886	851-3464
Allgood, James G., (Peggy), Prof. Emer., Ec. & Bus. 126 Cole Ct., Cary 27511		467-9547
Allison, Beecher C., (Gail), Ext. Area Lvstk. Spec., Ani. Sci. 516 Test Farm Rd., Waynesville 28786		704-456-7520
215 Crestridge Dr., Waynesville 28786		704-456-8280
Allison, Jackie H., (Tom), Supv., Med. Rec., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 213-D Hudson St., 27608	829-4200	832-3387
Allison, Richard C., (Louise), Ext. Assoc. Prof. & Spec., Ext. For. Resou. 3036-E Biltmore, Box 8003; 5724 Rail Fence Rd., 27606	3386	851-4126
Allred, J. Carl, (Linda B.), Asst. Dir., Facil. & Oper., Comp. Ctr. 110 Hillsborough Bldg., Box 7109; 5313 Barclay Dr., 27606	2517	851-3673
Allred, Linda B., (Carl), Comp. Sys. Coord., Supv., Purch. & Stores 217 Alumni, Box 7212; 5313 Barclay Dr., 27606	2171	851-3673
Almekinders, Sally V., (Louie), Asst. Prof., Phys. Educ. 2016C Carmichael, Box 8111; 5409 Penrith Dr., Durham 27713	2487, 2488	544-1367
Alonso, Dr. Silvia T., (Hector), Assoc. Prof., For. Lang. & Lit. 115 1911 Bldg., Box 8106; 1305 Ashburton Rd., 27606	2475	851-5124
Alston, Clifton P., (Diane), Agri'l. Res. Tech., Plant Path. 3127 Ligon St., Box 7631; 5309 Lake Wheeler Rd., 27603	2734	779-0917
Alston, Jean P., Baker, Univ. Dining B-113, Univ. Stu. Ctr. Box 7307; 506 Lansing St., 27510	2021	829-9150
Altman, Richard, Lect. Lands. Arch., Design A 304 Brooks, Box 7701; 1209 N. Calvert St., Baltimore, MD 21202	3051, 3052	301-539-2930
Ambrose, Dr. John T., (Judith), Assoc. Prof., Ent. 1114 Grinnells, Box 7626; 8001 Haymarket Ln. 27609	3140	847-9570
Ambrose, Richard J., Adj. Prof., Text. Chem. Lord Corporation; 109 Loch Haven Lane, Cary 27561		859-0143
Amein, Dr. Michael, (Marietta), Prof., Civil Engr. 201D Mann, Box 7908; 306 Electra Dr. Cary, 27511	2331	787-3870
Amerson, Dr. Henry V., (Ellen), Assoc. Prof., For. & Bot. 2203 Gardner, Box 7612; 5020 Stonehill Dr., 27609	3600	787-4762
Ammerman, Bonnie E., Res. Tech., Micro., Path. & Parasit., SVM 4700 Hillsborough St., Box 8401; 3427 Chapel Hill Rd., Durham, 27707	829-4364	489-0416
Ammons, James L., (Janice), Litho Press Oper., Univ. Graphics Sullivan Dr., Box 7226; 3701 Buffalo Rd., 27604	2131	
Amoozegar, Dr. Aziz, (Simin), Asst. Prof., Soil Sci. 1310 Williams, Box 7619; 10301 Roadstead Way West, 27612	3967, 3285	848-2120
Anderson, Alan B., Agri'l Res. Tech., For. Res. Annex West, Box 8002; 1711 Apt. D, College View Ave., 27606	3596	832-3493
Anderson, Dr. Charles E., (Bonnie), Prof., Bot. 3114 Gardner, Box 7612; 3969 Wendy Ln., 27606	2224	851-5091
Anderson, Dr. Clifton A., (Anne), Prof. Emer., Ind. Engr. 320 Yarkin St., 27609		787-1390
Anderson, Dr. Donald B., (Anne), Prof. Emer., Bot. 620 Greenwood Rd., Chapel Hill 27514		942-2658
Anderson, Donald L., (Silvia), Lab. Mgr., SVM 4700 Hillsborough St., Box 8401; 303 Hasting Pl., Cary, 27511	829-4200	467-1729
Anderson, Harry E., (Judith), Gen. Mgr., Faculty Club 4200 Hillsborough St., Box 8611; 4200 Hillsborough St., 27606	828-0308	828-1758

Name, Title, Department and Address	Office Phone	Resid. Phone
Anderson, Dr. James M., (Betty), Asst. Prof., Crop Sci. & Bot. 3127 Ligon St., Box 7631; 5004 Deergarden Ct., 27606	3905	851-8887
Anderson, John O., (Evelyn), Res. Aide, Soil Sci. 3319 Williams, Box 7619; 3122 Woodpecker Ct.	2636	832-9631
Anderson, Dr. John R., Jr., (Margaret), Assoc. Prof., Ext. Spec., Crop Sci. ... 2406 Williams; Box 7620; 6020 Tarnhour Ct., 27612	2246	848-9276
Anderson, Joice A., Patrol Off., Public Safety Field House, Box 7220	3206	
Anderson, Judith S., (Harry), Nurse, Health Serv. Clark Inf., Box 7304; 4200 Hillsborough St., 27606	2564	828-1758
Anderson, Dr. Kevin L., (Wendy), Asst. Prof., Food Ani. & Equ. Med., SVM 4700 Hillsborough St., Box 8401; 110 Loch Lomond Cir., Cary 27511	829-4245	362-9293
Anderson, L. Gayle, Acct. Tech., Payr. & Ben. Admn. Serv. Ctr., Lower Level, Box 7215	2151	
Anderson, Dr. Norman D., Prof., Math. & Sci. Educ. 326 Poe, Box 7801; 2431 H Wesvill Ct., 27607	2238	787-6926
Anderson, Robert, Gen. Utility Wkr., Phys. Plant Recla. Ctr. Box 7219; 500 Rock Quarry Rd., 27610	3800	832-6506
Anderson, Dr. Ruth D., Assoc. Prof., Speech-Comm. 224 Winston, Box 8104; Rt. 1, Box 205-A, New Hill, 27562	3247	542-4829
Anderson, Steven, (Diane), Res. Asst., NCSFNC, For. Biltmore, Box 8002; 112 Assembly Ct.; Cary 27511	3500	467-2318
Andrews, Flora, Hskp. Asst., Phys. Plant Park Shops Box 7219;	3323	
Andrews, Dr. Grover J., Assoc. Vice Chan., Univ. Ext. 217 McKimmon, Box 7401; P.O. Box 12407, 27605	3373, 3010	787-7344
Andrews, John C., (Jane), Asst. Dir., Thompson Thea. Thompson, Box 7305; 113½ Chamberlain St., 27650	2405	833-2782
Andrews, Olive M., Sec., Int'l. Stu. Off. 1201 Univ. Stu. Ctr., Box 7306; 911 New Kent Pl., Cary 27511	2961	467-7433
Andrews, Dr. Walter G., (Lois), Prof. Emer., Agri'l. Ext. 1520 Trailwood Dr., 27606		851-6271
Anson, Dr. Larry W., Surgery Resid., Comp. Ani. & Sp. Species Med., SVM 4700 Hillsborough St., Box 8401; 411 Trappers Run Dr., Cary 27511	829-4200	467-3263
Antony, Dr. Louise M., Asst. Prof. of Phil., Phil. & Rel. Winston G-107, Box 8103;	3214	
Apperson, Carol A., (Charles), Sec., Bot. 1231 Gardner, Box 7612; 1311 Lorimer Rd., 27606	3525	851-6913
Apperson, Dr. Charles S., (Carol), Assoc. Prof., Ent. 3320 Gardner, Box 7613; 1311 Lorimer Rd., 27606	2831	851-6913
Apple, Dr. J. Lawrence, (Ella), Coord., Univ. Int'l. Prog., Int'l. Agri. ... 209 Daniels, Box 7112; 1208 Bancroft Dr., 27612	3201, 2665	782-0479
Archibale, Barbara M., Acct. Clk., SSS SSS, Box 7224;	2161	
Archibale, Maebelle, (Swade), Hskp. Asst., Phys. Plant Park Shops Box 7219; 1116 Hazelnut Dr. 27610	3323	834-8767
Arends, Dr. James J., (Sharon Sue), Asst. Prof., Ent. 3312 Gardner, Box 7613; Rt. 1, Box 6790, Willow Springs 27592	2703, 2831, 2697	894-5684
Argenzio, Dr. Robert A., Prof., Anat., Physiol. Sci. & Radiol., SVM 4700 Hillsborough St., Box 8401; P.O. Box 287, Moncure, 27559	829-4227	542-5491
Armstrong, Dr. Frank B., Prof., Biochem. 137 Polk, Box 7622; 2757 Toxey Dr., 27609	2581	782-0770
Armstrong, G. Robert, (Nola), Dir., SSS SSS, Box 7224; 4708 Glen Forest Dr., 27612	2161	782-2854
Armstrong, Dr. Jeffery D., Asst. Prof., Ani. Sci. Polk, Box 7621; 2509 Pleasant Rd., Fuquay-Varina 27526	2763	
Armstrong, Dr. P. Jane, Asst. Prof., Comp. Ani. & Sp. Species Med., SVM 4700 Hillsborough St., Box 8401; 5909 Oxford Green Dr., Apex 27502	829-4235	779-3097
Arnold, Dr. John F., (Mary-Scott), Assoc. Prof., Curr. & Instr. 402-P Poe, Box 7801; 3925 Quail Hollow Dr., 27609	3221	876-7973

Name, Title, Department and Address	Office Phone	Resid. Phone
Arnold, Peggine L., (Thomas), Sec., For. 3024 Biltmore, Box 8002; Rt. 10, Box 96, 27603	2891	772-9564
Arnold, Sara W., (Jon), Sec., IES 210 Page, Box 7902; 3008 Hillmer Dr., 27609	2356	832-4759
Arnzen, Deborah L., Comm. Cash, Laundry Yarbrough Dr., Box 7218; Rt. 5, Box 22660, 27604	2122	266-0708
Aronson, Dr. Arthur L., (Marilyn Ann), Prof. & Head, Anat., Physiol. Sci. & Radiol., SVM 4700 Hillsborough St., Box 8401; 1213 Glendale Dr., 27612	829-4220	781-1089
Arrington, L. David, (Shirley), Agri'l. Res. Tech., Hort. Sci. 104 Hort. Sci. Grnhse., Box 7609; 701 Brookgreen Dr., Cary 27511	3132	467-0560
Artis, Frankye B., Counselor Serv. Coord., Acad. Skills Prog. 100 Reynolds Coliseum, Box 7104; 3101 Little John Rd., 27610	7053	
Arya, Dr. S. Pal, (Nirmal), Prof., Mar., Earth & Atmos. Sci. 400 Withers, Box 8208; 3517 Peach Haven Ct., 27607	7002	782-6298
Asbury, Michael L., Gen. Utility Wkr., Phys. Plant Heating Plant, Box 7219; 2331 Lowden St., 27608	2184	834-8143
Ashe, Betty J., Hskp. Asst. Phys. Plant Park Shops Box 7219; 2920 Gladstone Dr., 27610	3323	755-0767
Ashley, Mary E., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 1105 Seabrook Rd. 27610	3323	
Ashley, Virginia J., (Bobby), Clk.-Typ., Ani. Sci. P.O. Box 352, Edenton 27932; 204 E. Queen St., Edenton 27932	482-8431	482-3135
Askari, Farid M., (Lisa), Res. Assoc., Earth & Atmos. Sci. 223 Withers, Box 8208; 704 Coventry Ct., 27609	2803	787-2561
Askew, Thomas Dean, Agri'l. Res. Asst., Ani. Sci. 4616 Reedy Creek Rd., Univ. 1, Box 7621; 4113-156 Deep Hollow Dr., 27607	851-4868	781-7939
Atchley, Dr. William R., (Wilinda), Prof. & Head, Gen. 3513 Gardner, Box 7614; 8325 Lakewood Dr., 27612	2291	834-3397
Ater, Steven K., (Kelly Victor), Asst. Prof., Design 317 Brooks, Box 7701; 1020 W. Peace St., Rt. 5, 27605	2205	832-8039
Atkins, Joseph D., Stud. Serv. Rep., Text. S-62, Box 8301; 207 Loft Lane, 27609	3780	846-0869
Atkins, Marilyn D., Food Serv. Supv., Univ. Dining Quad Snack Bar; 234 Hillsboro Rd., Cary 25711	2124	467-1044
Atkinson, Anne M., Sec., Univ. Ext. 218 McKimmon Ctr., Box 7401; 805 Buckle Ct., 27609	3373, 3010	847-4280
Atkinson, Johnnie E., (Nannie), Gen. Utility Wkr., Phys. Plant 18 Riddick Stad., Box 7219; 27 Lee & Dupree Tr. Park, 27520	3479	553-3117
Atkinson, Lafayette, Tech., Rad. Prot. 214 Clark Labs, Box 7108;	2894	
Atkinson, Dr. Maxine P., (Richard Slatta), Assoc. Prof., Soc. & Anth. 320 1911 Bldg., Box 8107; 3304 Dell Dr., 27609	3114	781-3181
Attarian, Aram, Lect., Phys. Educ. 2028 Carmichael, Box 8111; 20 Cedar Village, Chapel Hill 27514	2487, 2488	929-0633
Atwood, Lee, (Harold), Clk.-Supv., Fin. & Bus. 2 Peele, Box 7213; Rt. 1, Box 234-B, Wendell 27591	2987	266-3075
Auciello, Dr. Orlando H., Assoc. Prof., Nuc. Engr. 2109 Burlington, Box 7909; 4333 Halliwell Dr., 27606	7662	859-2136
Auerbach, Dr. David D., (Alice Kaplan), Asst. Prof., Phil., Phil. & Rel. 117 Winston, Box 8103; 405 Canal Dr., 27606	3214	851-8917
Auld, William C., Dir., Educ. & Trng., Urb. Aff. 267 McKimmon, Box 7401	2578	
Aurand, Dr. Leonard W., (Eleanor), Prof., Food Sci. 236-F Schaub, Box 7624; 921 Trailwood Dr., 27606	2964	851-6782
Austin, Dr. David F., Asst. Prof. of Phil., Phil. & Rel. 107 Winston, Box 8103;	3214	
Austin, Helen C., Clk., Purch., Univ. Graphics Sullivan Dr., Box 7226; 4343 NC 42 West, Clayton, 27520	2133	553-7404
Austin, Jennifer A., Admn. Asst., Soil Mgmt., CRSP 4234 Williams, Box 7113; 3220 I Shire Ln., 27606	3922	851-5513

Name, Title, Department and Address	Office Phone	Resid. Phone
Austin, Dr. William W., (Lucia), Prof. Emer., Mat. Engr. 229 Riddick, Box 7907; 3221 Birnamwood Rd., 27607	2377	787-6946
Avent, Robert C., (Ann B.) Hksp. Asst., Phys. Plant Park Shops, Box 7219; Rt. 3, Box 109, Spring Hope, 27882	3323	478-3003
Averett, Lealon T., Jr., (Doris), Instru. Maker, Bio. & Agri'l. Engr. 130 Weaver Lab., Box 7625; 7615 Louisburg Rd., 27604	3101	876-6769
Averette, Edwin H., (Clora), Main. Mech., USDA-ARS 3127 Ligon St., Box 7631; 5806 Creedmoor Rd., 27612	3905	787-2993
Averette, Fred G., (Polly), Agri'l. Res. Tech., Soil Sci. 3401 Williams, Box 7619; Rt. 1, Knightdale 27545	3285	266-2805
Averitt, Samuel F., (Debbie), Mgr., Comm. & Hardware, Comp. Ctr. 109A Hillsborough Bldg., Box 7109; 1715 Banbury Rd., 27608	2517	781-7841
Averre, Dr. Charles W., (Joanne), Prof., Ext. Plant Path. 1409 Gardner, Box 7616; 2730 Van Dyke Ave., 27607	2711	834-3071
Avery, Raymond L., Hskp. Supv., Phys. Plant 13 Park Shops, Box 7219; 717 Newcombe Rd., 27610	3323	832-1638
Avery, Sandra T., Clk.-Typ., Info. Serv. 219 Oberlin Rd., Box 7504; 1006 Holmes St., 27601	3470	
Avery, Shirley V., (Cleveland), Acct. Clk., Phys. Sci. Res. 115 Cox, Box 8201; 108 Deepwood Cir., 27529	7445	834-9626
Axtell, Dr. Richard C., Prof., Ent. 3324 Gardner, Box 7613; 3427 Churchill Rd., 27607	2832	787-1321
Aycock, Dr. Robert, (Elsie), Prof. Emer., Plant Path. 1415 Gardner, Box 7616; 2001 Manuel Dr., 27612	2711	787-2797
Ayers, Betty W., Res. Tech., Soil Sci. 3303 Williams, Box 7619; 3003 Barnsley Tr., 27604	2635	828-4800
Ayoub, Dr. Mahmoud A., (Amira), Prof., Ind. Engr. 321 Riddick, Box 7906; 1204 Glendale Dr., 27612	2362	782-6831
Ayscue, Billie H., LPN, Health Serv. Clark Inf., Box 7304; 797 Crestwood Dr., 27529	2562	779-7037

B

Babeock, Susan F., Asst Dir., Train. & Dev., Human Resou. Admn. Serv. Ctr., Box 7210; 450 Peeble Creek Dr., Cary 27511	7844	469-9936
Babeock, Willard F., Prof. Emer., Civil Engr. 410 Mann, Box 7908; 2611 Wells Ave., 27608	2331	787-6979
Babineau, Cynthia A., (Paul), Lab Tech., Comp. Ani. & Sp. Species Med., SVM 4700 Hillsborough St., Box 8401; 507 Middleton Dr., 27511	829-4323	469-0021
Bacheler, Dr. Jack S., (Jeanne), Prof., Ent. 2310 Gardner, Box 7613; 6021 Splitrock Tr., Apex 27502	2697	772-1850
Bacheler, Jeanne E., (Jack), Comp. Prog., Ent. 840 Method Rd., Unit I, Box 7628; 6021 Splitrock Tr., Apex 27502	2638	772-1850
Bachmann, Dr. Klaus J., (Monika), Prof., Chem. 45 Dabney, Box 8204	2538	
Bachman, Dr. Michael E., (Mary), Asst. Dir., Counseling, Counseling Ctr. ... 200 Harris, Box 7312; 7804 Wood Way Court, 27606	2423	851-0985
Badger, Alma E., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 822½ E. Lenoir St., 27601	3323	832-3507
Badger, Stella S., (James E.), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 103 Harper St., 27529	3323	772-7356
Badgett, Andrew, Agri'l. Res. Asst., Univ. Res. Unit 2 3720 Lake Wheeler Rd., Box 7601; 407 S. Montague St., 27609	2759	779-9552
Baetzel, Karen L., (Bernie), Lt., USN, Instr., Naval Sci. 104, 304 Reynolds Coliseum, Box 7310; Rt. 12, Box 191, Hudson Rd., Chapel Hill 27514	2907, 2908	493-5161
Bagby, Robert F., Comp. Oper., Library Sys., Library, Box 7111; 7 Ashe Ave., 27605	2339	833-9947
Bai, Dr. Stephen A., Asst. Prof., Pharmacology, Anat., Physiol. Sci. & Radiol., SVM 4700 Hillsborough St.; 4115 Iver Johnson Dr., 27606	829-4200	851-3719

Name, Title, Department and Address	Office Phone	Resid. Phone
Bailey (CPT), Albert E., (Cathy), APMS, Mil. Sci. 154 Reynolds Coliseum, Box 7309; 210 Trappers Run Dr., Cary 27511	2428	467-2663
Bailey, Audrey Kates, (Jesse), Prod. Reporter 211-A TV Ctr., Box 8601; 4355-4 Avent Ferry Rd., 27606	2853	851-0685
Bailey, Bobbie E., (Floyd), Data Entry Supv., Dairy Rec. Proc. Ctr. Leazar, Box 7623; 6516 Pleasant Pines Dr., 27612	2075	787-1235
Bailey, Deborah K., Data Entry Oper., Dairy Rec. Proc. Ctr. 123 Leazar, Box 7623; Rt. 1, Box 110-C, Youngsville, 27596	2075	556-1748
Bailey, Dr. Jack E., (Becky), Asst. Prof., Plant Path. 1413 Gardner, Box 7616; 3623 Swann Dr., 27612	2711	781-0730
Bailey, James W., Assoc. Prof., CDR, USN, Naval Sci. 6 Tupelo Ln., Chapel Hill 27514	962-1198/2344	
Bailey, Jean E., (Joseph, Jr.), Acct. Clk., Libr. Library, Box 7111; 1853 Eastern Blvd., 27610	2843	828-9899
Bailey, Dr. John A., (Anne), Prof. & Head, Mech. & Aero. Engr. 3211 Broughton, Box 7910; 1214 Gray Owl Garth, Cary 27511	2365	467-4353
Bailey, Melanie A., Sys. Analyst, Admn. Comp. Serv. Leazar, Lower Level, Box 7209; 1650 Sutton Dr., 27607	3541	851-9212
Bailey, Nancy G., (Graham), Res. Tech., Poul. Sci. 228 Scott, Box 7608; 7404 Longstreet Dr., 27609	2623	847-4370
Baines, Dr. Barbara J., (Leigh DeNeef), Prof., Engl. 248 Tompkins, Box 8105; 1623 Park Dr., 27605	3870	828-2753
Baird, Bobbi B., (Larry), Workshop Coord., IES 215-A Page, Box 7902; 3305 Glenridge Dr., 27604	2358	876-5181
Baird, Dr. Jack V., (Leota), Prof. & Spec. In Charge, Soil Sci. Ext. 3403 Williams, Box 7619; 3730 Swift Dr., 27606	3285	851-0169
Baker, Bonnie L., (Maurice), Libr. Tech. Asst. 1214 Library, Box 7111; 1014 James Pl., 27605	3364	828-7639
Baker, Claudia R., Film Librn., IES 213 Page, Box 7902; 410 Hilltop Ave., Garner 27529	2356	772-4370
Baker, Connie H., Clk.-Typ., Mar., Earth & Atmos. Sci. 214 Withers, Box 8208;	3711	
Baker, Donald H., (E.J.), Asst. Whse. Supt., N.C. Found. Seed Prod. 4025 Beryl Rd., Box 8603; Rt. 1, Box 196B, Youngsville 27596	2821	556-2402
Baker, Dr. James R., (Faye), Prof., Ent. 3307 Gardner, Box 7613; Rt. 4, Box 82C, Apex 27502	2697, 2703	362-1044
Baker, Josepine, Hskp. Asst., Phys. Plant Park Shops, Box 7219; 1208 Boyer St., 27610	3323	833-0002
Baker, Mary P. (Al Tarrel), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 508 S. Swain St., 27601	3323	834-6557
Baker, Michael W., (June), Mgr., N.C. Found. Seed Prod. 4025 Beryl Rd., Box 8603; 200 Breckenridge Dr., Knightdale 27545	2821	266-9069
Baker, Paul, D., (Charlotte), G.C. Supt., Faculty Club 4200 Hillsborough St., Box 8611; Box 813, Creedmoor 27522	828-0308	528-0173
Baker, Richard C., Asst. Athl. Trainer, Athl. Weisiger-Brown Athl. Fac., Box 8502; 2709-23 Brigadoon Dr., 27606	3960	851-2276
Baker, Rosa, Hskp. Asst., Phys. Plant Park Shops, Box 7219; 105 Plaza Dr., Garner, 27529	3323	755-0549
Baker, Sherry L., (James), Clk.-Typ., Bio. & Agri'l. Engr. 107 Weaver, Box 7625; Rt. 2, Box 343-H, Wake Forest 27587	2694	266-5140
Baker, Susan W., Data Control Clk., Dairy Rec. Proc. Ctr. Leazar, Box 7623; 1418 Faye Dr., Garner 27529	2074	779-1325
Baker-Ward, Dr. Lynne E., (James), Asst. Prof., Psy. 760 Poe, Box 7801; 311 Fairfield Ln., Cary 27511	2254	
Balboni, Jo Ann H., (Henry), Acct. Tech., Fund. Acct. 213 Admn. Serv. Ctr., Box 7203; 1329 Doylin Dr., Cary 27511	2149	469-0621
Baldwin, Edward M., Women's Asst. Basketball Coach, Athl. 2B Case Athl. Ctr., Box 8501; 7109 3A Sandy Forks Rd., 27609	2880	847-3114
Baldwin, Jane, Asst. Head, Collection, Dev. & Acq., Serials Acqs., Libr. Library, Box 7111	3188	
Baldwin, Patricia H., Libr. Clk., Acqs., Libr. 3108-D Library, Box 7111; 3000 Stoneybrook, 27604	3188	
Baldwin, Robert D., (Cynthia), Res. Tech., Min. Res. Lab. 180 Coxe Ave., Asheville 28801; 2 Brookgreen Pl., Asheville 28804	704-251-6155	704-254-5330

Name, Title, Department and Address	Office Phone	Resid. Phone
Balickie, Carolyn S., (Joe), Admn. Asst., Soil Sci. 2229 Williams, Box 7619; Rt. 2, Box 56G, Apex 27502	2655	362-5185
Balik, Dr. C. Maurice, (Suzanne), Asst. Prof., Mat. Engr. 246 Riddick, Box 7907; 306 Dunhagan Pl., Cary 27511	2126	467-7357
Ball, Cynthia J., Univ. Dev. Off., Development 20 Enterprise St., Box 7502; 4270 Lake Ridge Dr., 27604	2034	872-1193
Ball, Dr. David S., (Brenda), Assoc. Prof., Ec. & Bus. 18-H Patterson Box 8109; 1121 Harvey St., 27608	2258	834-1684
Ball, Dr. Hershell R., Jr., (Kay), Prof., Food Sci. 339 Schaub, Box 7624; Rt. 1, Box 62, New Hill 27562	2971	362-9527
Ballance, Lynn C., (Eddie), Libr. Clk., Serials G-116 Library, Box 7111; 906 Jason Ct., Cary 27511	7021	467-9432
Ballas, Dr. Lawrence M., Asst. Prof., Anat., Physiol. Sci. & Radiol., SVM 4700 Hillsborough St., Box 8401; 6010 Applewood Ln., 27609	829-4221	872-9318
Ballenger, Dr. William L., (Anne), Dir., Info. Sys. Gr., School of Educ. 424 Poe, Box 7801; 3448 Leonard St., 27607	2681	787-5062
Ballentine, Lucy M., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 201 Star St. Apt-C, 27610	3323	832-9706
Ballinger, Carolyn H., (Randall), Sec., Hort. Sci. 2016 Fanning Bridge Rd., Fletcher 28732-9628; Rt. 1, Penn Rd., Horse Shoe 28742	704-684-3562	704-891-7844
Ballinger, Dr. Walter E., (Ellen), Prof., Acad. Coord., Hort. Sci. 116 Kilgore, Box 7609; 5612 Winthrop Dr., 27612	3189	787-1805
Ballington, Dr. James R., (Faye), Assoc. Prof., Hort. Sci. 256 Kilgore, Box 7609; 501 S. Harrison Ave., Cary 27511	3166	467-7503
Bambara, Stephen B., Ext. Spec., Res. Asst., Ent. Ext. 1118 Grinnells, Box 7626; 6000 Woodknoll Ct., 27606	3140	851-1233
Banadyga, Dr. Albert A., (Jerry), Ext. Prof. Emer., Hort. Sci. Emerald Isle, Morehead City 28557		354-2079
Banadyga, Patricia S., Sec., Ani. Sci. 202 Polk, Box 7621; 1011-F Village Greenway, Cary, 27511	2566	469-5616
Banasz, Dianne M., (Dennis), Sec., Res. Admin. Lower Level Leazer, Box 7003; 1102 Highland Trail, Cary 27511	2444	467-9714
Bandy, Dr. Dale E., (Marinalva), Dir. of Res., NC Mission to Peru, Soil Sci. Apartado 248, Lima 100, Peru; Lima, Peru, Box 7619	2838	
Banker, Dr. James R., (Maureen), Asst. Dept. Head 122 Harrelson, Box 8108; 408 Stacy St., 27607	2485	828-8191
Banks, Alexander, Hskp. Asst., Phys. Plant Park Shops, Box 7219; 1206 South East St., 27601	3323	833-8287
Banks, Craven K., (Clarice), Lab. Ani. Tech., Poul. Sci. 48 Scott, Box 7608; 303 Carroll Dr., Garner 27529	2628	772-5832
Banks, Grady, Laborer, Phys. Plant Sullivan Dr., Box 7219; 1005 Smithfield St., 27601	3408	832-7054
Banks-Lee, Dr. Pamela, Asst. Prof., Text. Engr. & Sci. 201-A Nelson, Box 8301; 3800 C Bonneville Ct., 27604	3481	
Banner, Wendy B., (Roger), Clk.-Typ. Phys. Educ. 2008 Carmichael, Box 8111; 3508 Berdan Ct., 27604	2487	266-5919
Bao, Dr. Han, (Yen), Asst. Prof., Ind. Engr. 206 Park Shops, Box 7906; 5224 Cedarwood Dr., 27609	7816	782-6758
Barber, Willie, (Elizabeth), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 1108 E. Morgan St., 27610	3323	828-4233
Barbour, Barbara C., (Dewey), Res. Tech., Food Sci. 231 Schaub, Box 7624; 1515 Cherokee Dr., 27608	2965	834-3895
Barbour, Joyce J., (James E.), Admn. Asst., Dean's Off., Hum. & Soc. Sci. 106 Link Bldg., Box 8101; 424 O'Neil St., Clayton 27520	2467	553-7264
Barbour, Maxine L., Admn. Sec., Admis. 112 Peele, Box 7103; 2532 Greenway, 27608	2437	787-9314
Barbour, Morris, (Jean), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 246 Front St., Clayton, 27520	3323	553-5049
Barbour, Richard L., (Debbie), Maint. Mech., Athl. Reynolds Coliseum, Box 8501; P. O. Box 111, Wilson's Mills 27593	2108	934-1336

Name, Title, Department and Address	Office Phone	Resid. Phone
Barbour, Ricky R., Dupl. Equip. Oper., Agri'l. Comm. ....2791 23 Ricks, Box 7603; 2415 Everett Ave., 27606		833-5063
Barbour, Willard C., (Shirley), Boiler Oper. Shift Supv., Phys. Plant .....2184 Heating Plant, Box 7219; Rt. 3, Box 92, Benson, 27504		894-2953
Barclay, Gwen L., Lect., Engl. ....3863 281 Tompkins, Box 8105		
Barclay, Dr. William J., (Jeannette), Prof. Emer., Elec. & Comp. Engr. ....2336 405 Daniels, Box 7911; 600 Davidson, 27609		787-6000
Barefoot, Dr. Aldos C., Prof., Univ. Stud. ....2470, 2479 Box 7107; 3401 Hampton Rd., 27607		787-8736
Barefoot, Linda C., (Roland), Litho Proc., Univ. Graphics .....2131 Sullivan Dr., Box 7226; 2010 Oliver Rd., Clayton 27520		553-4727
Barefoot, Sannie D., (Joey), Clk.-Typ., Naval Sci. ....2757 104 Reynolds Coliseum, Box 7310; 606 Curtiss Dr., Garner 27529		772-5477
Barefoot, Tommy C., (Brenda), Supt. Steam Util., Phys. Plant .....2184 13 Morris, Box 7219; 2809 Matthews Rd., Clayton 27520		934-5943
Bargeloh, Linda J., (John), Acct. Clk., Agri'l. Ext. Admin. ....3158 120 Patterson, Box 7601; 6005 Dodsworth Dr., 27612		787-2183
Barham, Edna J., (Lee), Data Control Clk., Dairy Rec. Proc. Ctr. ....2074 Leazar, Box 7623; Rt. 4, Box 211-A, Wake Forest 27587		556-1572
Barker, Dr. James C., Ext. Prof., Bio. & Agri'l. Engr. ....2675 212 Weaver Lab, Box 7625; 131 S. Boylan, 27603		834-1123
Barker, Jerry W., (Sandy), Admn. Dir., Health Educ. Progs., Health Serv. ...2563 Clark Inf., Box 7304; Rt. 1, Box 346-4, 27614		847-4379
Barker, Dr. Kenneth R., (Betty), Prof., Plant Path. ....3330 840 Method Rd., Unit II, Box 7628; 1515 Delmont Dr., 27606		851-2051
Barker, Dr. Roger L., (Naomi), Assoc. Prof., Text. Engr. & Sci. ....3481 B11 Nelson, Box 8301; 1505 Lake Park Dr., 27612		847-0614
Barkhouse, Walter E., (Verna), Dir., Oper., Univ. Dining .....2124 Quad Snack Bar, Box 7307; 5412 Avent Ferry Rd., 27606		
Barkley, Dr. Key L., (Lois P.), Prof. Emer., Psy. ....2251 626 Poe, Box 7801; 2204 Garden Pl., 27607		834-7098
Barlowe, Judy K., Sec., Undergrad Aff., Mech. & Aero. Engr. ....2365 3223 Broughton, Box 7910; Rt. 12, Box 121, 27610		266-3665
Barner, George W., (Marjorie), Lab. Mgr., SVM .....829-4200 4700 Hillsborough St., Box 8401; 7205 Stephen Boyd Ct., 27604		872-4495
Barner, Marguerite W., Hskp. Asst., Phys. Plant .....3323 Park Shops, Box 7219; 1222 Downing Rd., 27610		755-1680
Barnes, Dr. Donald W., Jr., (Pat), Assoc. Prof., Emer., Design .....904-997-3078 305-A Brooks, Box 7701; Rt. 1, Box 111-D, Lamont, Fl., 32336		
Barnes, Dr. H. John, (Nona), Prof., Food Ani. & Equ. Med., SVM .....829-4273 4700 Hillsborough St., Box 8401; 1601 Medfield Dr., 27607		851-5230
Barnes, Kenneth R., (Mary), Lab. Ani. Tech., .....829-4200 Vet. Teach. Hosp., SVM		639-2790
8401 Hillsborough St., Box 8401; Rt. 1, Box 176-A, Angier, 27501		
Barnes, Linda F., Data Entry Oper., Admin. Comp. Serv. ....2459 12 Peele, Box 7208; Rt. 1, Box 791, Selma 27576		965-8867
Barnes, Paula J., Payr. Clk., Payr. & Ben. ....2151 Admn. Serv. Ctr., Box 7215		
Barnes, Wanda E., Rec. Clk., Human Resou. ....7929 Admn. Serv. Ctr., Box 7210; 1316 S. State St., 27610		821-4393
Barnett, Steven J., (Debbie), Comp. Sys. Coord., SSS .....2161 SSS, Box 7224; 121-A Hunt Club Lane, 27606		851-3564
Barnhouse, Kenneth R., Sys. Prog., Engr. ....2345 223 Page, Box 7903; 2320 H Clark Ave., 27607		821-1673
Barr, James T., Elect., Phys. Plant .....3080 Armory Shop, Box 7219; 1200-B Springview Tr. Garner, 27529		821-1739
Barrax, Gerald W., (Joan), Assoc. Prof., Engl. ....3870 230 Tompkins, Box 8105; 808 Cooper Rd., 27610		829-1310
Barrett, LaVon B., (Terry), Acct. Clk. Supv., Acct. Pay. ....2139 213 Admn. Ser. Ctr., Box 7204; 618 Wills Forest St. #1, 27605		834-5917
Barrick, Elliott R., (Elsie Mae), Prof. Emer., Ani. Sci. ....779-1199 5310 Old Stage Rd., 27603		

Name, Title, Department and Address	Office Phone	Resid. Phone
Barrios-Cader, Cristina, Vis. Lect., Arch. 302 Brooks, Box 7701	2205	
Barthalmus, Dr. George T., Prof., Zool. 4109 Gardner, Box 7617; 1429 Fairway Ridge Dr., 27606	2698	851-2253
Bartholomew, Thomas A., Agri'l. Res. Tech., Crop Sci. 4309 Williams, Box 7620; 2300 New Hope Rd., 27604	3196,3216	833-6735
Bartlett, Helen, (David), Lab. Res. Spec., Ani. Sci. 304 Polk, Box 7621; 1203 Balmoral Dr., Cary 27511	2773	481-0458
Bartlett, Jacqueline K., Lect., Phys. Educ. 2029 Carmichael, Box 8111; 4319 Talcott Dr., Durham, 27705	2487	383-8131
Bartley, Andrew J., (Thelma), Prof. Emer., Ec. & Bus. Box 8109; Rt. 4, Box 418, 27606	3273	851-0735
Bartocha, Dr. Bodo, Vis. Prof., Int'l Aff., Int'l Prog. 206 Daniels, Box 7112		7145
Barton, C. Lennie, (Debra), Asst. to Dean, Stu. Serv. Placement Dir., Text. 120A Nelson, Box 8301; 2332 Ravenhill Dr., 27609	3780	872-4916
Bartom, Norman E., (Helen), HVAC Mech., Phys. Plant Armory, Box 7219; 5001 Old Stage Rd., 27603	3080	772-6534
Bartuska, Dr. Ann, (Mark Walbridge), Prog. Coord., For., Acid Depos. Prog. 1509 Varsity Dr., Box 7632; Rt. 7, Box 254B, Chapel Hill 27514	3520	968-1303
Basel, Dr. Dean L., Instr., Micro, Path. & Parasit., SVM 8401 Hillsborough St., Box 8401; 105 F Duden Ct., Cary 27511	829-4319	469-8874
Bass, Jim F., (Sarah), Asst. Dir., Wolfpack Club College Inn, Box 8602; 8320 Bells Lake Rd., Apex 27502	2112	779-6884
Bass, Kathy B., (Jim), Ck., Phys. Plant 121 Morris, Box 7219; 1502 Maple Ave., Apex 27502	3955	
Bass, Larry, (Joyce), Ext. Spec., Hort. Sci. 123 Kilgore, Box 7609; 5108 Marwood Dr., 27604	3537	872-3997
Bassett, Dr. John E., (Kay), Prof. & Head, Engl. 131-B Tompkins, Box 8105; 328 Farmington Woods Dr., Cary 27511	2462	467-5255
Bassett, Lyle C., Main. Mech., Ani. Sci. Rt. 2, Raleigh-Randeligh, Box 7621; P.O. Box 37222, 27627	772-6711	266-1476
Batchelor, James G., Mech., Phys. Plant Riddick Stad., Box 7219; 120 Old Drug St., Garner, 27529	3749	772-8426
Batchelor, Peter, (Barbara), Prof., Urban Design 308 Brooks, Box 7701; 4233 Rowan St., 27609	2204	787-6388
Bateman, Dr. Durward F., (Shirley), Dean, Agri. & Life Sci. 112 Patterson, Box 7601; 4026 Glenn Laurel Ln., 27612	2668	782-4306
Bates, Helen L., Nurse, Health Serv. Clark Inf., Box 7304; 904 Carlisle St., 27610	2563	832-3173
Bathke, Jayne M., (Glenn), Data Proc. Asst., Ani. Sci. 226 Polk, Box 7621; 1808 Lorimer Rd., 27606	2769	851-3304
Batra, Dr. Subhash K., Prof., Text. Engr. & Sci. 301 Nelson, Box 8301; 3465 Leonard St., 27607	3481	781-0002
Batson, Linda K., Vet. Tech., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 718 Braniff Dr., 27511	829-4200	467-2508
Batte, Dr. Edward G., (Elizabeth), Prof. Emer., Microb., Path. & Parasit., SVM 4700 Hillsborough St., Box 8401; 715 Beaver Dam Rd., 27607	829-4200	833-9766
Battle, Beroniah, Ck. Recept., Phys. Plant 103 Morris, Box 7219	2181	
Batton, George O., Lect., Mech. & Aero. Engr. 1228 Broughton, Box 7910; 210 Loop Rd., Garner 27529	3024	772-0514
Batts, Brenda Y., (Royce), Wordprocessor, Mar., Earth & Atmos. Sci. 220 Withers, Box 8208; 2520 Prince Dr., 27606	3711	851-5259
Batts, Hazel M., Lect., Math. 309 Harrelson, Box 8205; 1301-10 Hardimont Rd., 27609	7178	
Batts, Royce W., (Brenda), Agri'l. Res. Tech., Ent. 4301 Gardner, Box 7613; 2520 Prince Dr., 27606	2833	851-5259
Baughman, Dr. Gerald R., (Carolyn), Assoc. Prof., Bio. & Agri'l. Engr. 182 Weaver Lab., Box 7625; 5133 Huntingdon Dr., 27606	3121	851-5441

Name, Title, Department and Address	Office Phone	Resid. Phone
Baumer, Dr. David L., (Joan), Assoc. Prof., Ec. & Bus. 220-G Patterson, Box 8109; 1307 College Pl., 27605	2608	821-2613
Bayley, William K., (Dana), Learn. Resource Spec., Media Ctr., Design 125 Brooks, Box 7701; 1717 Haley Ct., 27606	3785	832-4247
Baylor, Sarah L., Libr. Clk., Periodicals Serv. Ctr. G-114 Library, Box 7111; 20 Mayo St., Apt. H-4, 27603	3136	821-7752
Beals, Allen M., (Betsy), Lect., Ec. & Bus. 10A Patterson, Box 8109; 2335 Reedy Creek Rd., Cary 27511	2605	467-7093
Beard, David W., (Kathy), Res. Tech., Hwy. Proj., Crop Sci./Turfgrass Mgmt. 1126 Williams, Box 7620; Box 85, Brentley Dr., Apex 27502	2657	779-2094
Beard, Jane M., (Barry), Admn. Sec., Int'l. Agri. 209 Daniels, Box 7112; 3316 Morningside Dr., 27607	3201	782-8966
Beard, Kathryn C., (David), Clk., Fin. & Bus. 2 Peele, Box 7213; Box 85, Brentley Dr., Apex 27502	2986	779-2094
Beasey, Douglas B., Assoc. Rad. Prot. Off., Rad. Prot. 214 Clark, Box 7108	2894	
Beasley, Deborah J., (Kenneth W.), Data Entry Asst., Alumni Rel. Alumni, Box 7503; 4632 Arrowhead Dr., Apex 27502	3375	362-5695
Beasley, Eustace O., (Dot), Ext. Prof., Bio. & Agri'l. Engr. 214 Weaver, Box 7625; Rt. 3, Box 184, Garner 27529	2675	772-3408
Beasley, R. Eric, (Heather), T.V. Prod. & Dir., Biomed. Comm. Ctr., SVM 4700 Hillsborough St., Box 8401; 7333 Brookbank Ln., 27609	829-4206	878-8256
Beattie, Dianne Z., Lab. Tech., Gen. 3621 Gardner, Box 7614; 1817 Arlington St., 27608	2289	821-3660
Beatty, Dr. Kenneth O., Jr., R. J. Reynolds Prof. Emer., Chem. Engr. 12 Riddick, Box 7905; 323 Shepherd St., 27607	2324	833-7626
Beavers, Randall W., Utility Wkr., Min. Res. Lab. 180 Coxie Ave., Asheville, 28801, 213 Caribou Rd., Asheville, 28803	704-251-6155	704-274-0127
Bechtol, Douglas N., Libr. Technical Asst., Monographic Cat. Library, Box 7111; P.O. Box 25786, 27611	2603	833-5391
Bechtolt, Randall N., Lect., Phys. Educ. 2012 Carmichael, Box 8111; 405 S. Lakeside Dr., 27606	3161	851-2448
Beck, Dr. Keith R., (Beverly), Assoc. Prof., Text. Chem. 218K Clark, Box 8302	2551	
Beck, Dr. Richard D., (Eunice), Dir. Electronics Lab., Chem. 16 Dabney, Box 8204; 201 Wendy Ct., Cary 27511	2248	469-1356
Beckmann, Dr. Robert L., (Bobbee), Assoc. Prof., Bot. 2714 Bostian; 3104 Paxton Pl., 27612	3341	848-4058
Bedair, Dr. Salah M., (Nadia), Prof., Elec. & Comp. Engr. 440 Daniels, Box 7911; 201 Woods Ream, 27609	2336	847-5954
Beddingfield, Alexander E., (Saxe F.), Public Info. Asst., Comm. Coll. Review, Adult & Comm. Coll. Educ. 310 Poe, Box 7801; 2105 Noble Rd., 27608	3591	833-6262
Beddingfield, Lee T., Clk.-Typ., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 2604 New Hope Church Rd., 27604	829-4200	872-2814
Beegle, Kim H., Supv., Micro. Path. & Parasit., SVM Hybridoma Facility, Box 8401; Rt. 4, Box 410, Durham, 27703	829-4351	596-7207
Beeker, Henry J., Jr., (Rebekah), Comp. Sys. Coord., Admn. Comp. Serv. ... 12 Peele, Box 7208; 5321 Barclay Dr., 27606	2459	851-2856
Beeler, Dr. Joe R., Jr., Prof., Mat. Engr. 241 Riddick, Box 7907	2125	
Beers, Dr. Burton F., (Pauline), Prof., Hist. 134 Harrelson, Box 8108; 629 S. Lakeside Dr., 27607	2483	851-3556
Beeson, James L., Agri'l. Res. Tech., Soil Sci. 3401 Williams, Box 7619; 513 Brent Rd., 27606	2190, 3285	851-6732
Beezer, Dr. Bruce G., (Marilyn), Assoc. Prof., Educ. Leadership & Prog. Eval. 608 E Poe, Box 7801; 1144 Sturdivant Dr., Cary 27511	3127	467-3120
Beezley, Alda R., Clk., Bio. & Agri'l. Engr. 100 Weaver, Box 7625; 2729 Everett Ave., 27607	2694	828-5074
Beezley, Dr. William H., (Cheryle), Prof., Hist. 108 Harrelson, Box 8108; 4812 Kaplan Dr., 27606	2485	851-9557

Name, Title, Department and Address	Office Phone	Resid. Phone
Behlow, Dr. Robert F., Prof. Emer., Ani. Sci. 104-A Polk, Box 7621; 603 Macon Pl., 27609	2566	787-1827
Beifield, Rabbi Martin, Jewish Chaplain, Coop. Campus Min. 5315 Creedmoor Rd.; 4500 Wenchelsea Pl., 27612	781-4895	781-3182
Belding, Robert D., Agri'l. Res. Tech., Hort. Sci. 59 Kilgore, Box 7609; 649 S. Lakeside Dr., 27606	3346	859-1001
Belding, Suzanne T., (Bob), Res. Tech., Hort. Sci. 201 Kilgore, Box 7609; 649 S. Lakeside Dr., 27606	3167	859-1001
Bell, Lawrence T., Rec. Clk., Reg. & Rec. 100 Harris, Box 7313; 2516-204 Avenet Ferry Rd., 27606	2572	839-0346
Bell, Norman R., (Dorothy), Assoc. Prof. Emer., Elec. & Comp. Engr. 405 Daniels, Box 7911; 2312 Woodrow Dr., 27609	2336	787-1177
Bell, P.J., Comm. Spec., Human Resou. Admn. Serv. Ctr., Box 7210; 711 E. Chatham St., Apex, 27502	3703	
Bell, Robert E., Laborer, Phys. Plant Sullivan Dr., Box 7219; 405 E. Morgan St., 27601	3408	
Bell, Siliae, (Tessie), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 1502 Axum Rd., Garner 27529	3323	772-0075
Bell, Dr. Thomas A., (Helen), Prof. Emer., Food Sci. Box 7624; 117 Montgomery St., 27607		833-6154
Bellinger, Marilyn A., (Don), Micro., Path., & Parasit., SVM 4700 Hillsborough St., Box 8401; 1101 Kingwood Dr., 27609	829-4256	872-6122
Bend, Dr. John R., Adj. Prof., Ent. NIEHS, Res. Triangle Park; 928 Ravenwood Dr.	541-3422	851-7231
Benevides, Marie L., (David), Chem. Demon., Chem. 114 Dabney, Box 8204; 504 Annandale Dr., Cary 27511	2296	467-8942
Bengel, Dr. James E., (Connie), Psy., Counseling Ctr. 200 Harris, Box 7312; 2124 Kipawa St., 27607	2423	782-2247
Bengtson, Dr. Mary W., (Neal), Physician, Health Serv. Clark Inf., Box 7304; 5305 Olive Rd., 27606	2564	859-0263
Bengtson, Dr. Neal M., (Mary Kay), Asst. Prof., Comp. Sci. 131-F Daniels, Box 8206; 5305 Olive Rd., 27606	7291	859-0263
Benites, Dr. Jose R., (Sara), Vis. Asst. Prof., Soil Sci. Yurimaguas, Peru, Box 7619; Yurimaguas, Peru		
Bennett, Barbara, Food Serv. Supv., Univ. Dining Dining Hall, Box 7307	3963	
Bennett, Ellen C., (Roy L.), Libr. Tech. Asst., Serials G116 Library; 6921 Electra Dr., 27607	3584	851-2044
Bennett, Henry, (Olee), Laborer, Phys. Plant Armory Shop, Box 7219; 2520 Old Garner Rd., 27610	3080	821-3077
Bennett, Kevin L., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 110 Center St., Garner 27529	3323	772-7798
Bennett, Dr. Landis S., (Louise), Head Emer., Visual Aids 35 Springmoor Ct., 27609		848-7035
Bennett, Mitchell H., (Maxine), Agri'l. Res. Tech., Plant Path. 2412 Gardner, Box 7616; 705 Nellane Dr., Garner 27529	2721	772-0770
Bennett, Saunders C., Crop Sci. Spec. NC Crop Impr. Assn. 3709 Hillsborough St., Box 8604; 2713 Brigadoon Dr., Apt. 2, 27606	2851	851-9318
Bennett, Teresa D., Sec., Phys. & Math. Sci. 116 Cox, Box 8201; 2127A Gorman St., 27606	7841	851-2255
Bennett, Thomasene F., (Claude), Admn. Asst., Chan. Off. A Holladay, Box 7001; 5017 Oak Park Rd., 27612	2191	787-1348
Bennett, Dr. Willard H., (Douglas), Burlington Prof. Emer., Physics Box 8202; 2608 St. Mary's St., 27609		782-6272
Bennett, Wondelon F., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 907 Carolina Pine Ave., 27603	3323	839-8011
Benson, Dr. D. Michael, (Pat), Prof., & Grad. Administrator, Plant Path. 840 Method Rd., Unit III, Box 7629; 1504 Delmont Dr., 27606	3966	851-7758
Benson, G. P., (Alease), Painter, Phys. Plant Park Shops, Box 7219; Rt. 3, Box 372, Benson 27504	3323	894-3010
Benson, Gary E., (Amy P.), Plumber, Phys. Plant Armory Shop, Box 7219; Rt. 3, Benson 27504	3080	894-3053
Benson, Dr. Geoffrey A., (Elaine), Assoc. Prof., Ec. & Bus. 209-D Hillsborough Bldg., Box 8110; 1117 Sudbury Ct., 27609	3881	872-3115

Name, Title, Department and Address	Office Phone	Resid. Phone
Benson, Dr. Ray B., Jr., Prof., Mat. Engr. 3152 Burlington, Box 7907	2706	
Benson, Willard K., Elec. Apprentice, Phys. Plant Armory Shop, Box 7219; 801- Johnston Union Rd., Clayton 27520	3080	553-7107
Bent, Dr. Henry A., (Anne), Prof., Chem. 409 Dabney, Box 8204; 1105 Cowper Dr., 27608	2939	834-0667
Bentley, Deborah J., Nurse, Health Serv. Clark Inf., Box 7304; 1140 Sturdivant Dr., Cary 27511	2564	469-0899
Bentley, Duane F., (Melissa), Agri'l. Res. Asst., Gen. 3513 Gardner, Box 7614; 825 N. Bloodworth St., 27604	2285	834-9968
Bentley, John, Farm Supv., Univ. Res. Unit 2 3720 Lake Wheeler Rd., Box 7601; 3400 Campbell Rd., 27606	2759	851-0267
Bentley, Dr. Peter J., (Karin), Prof., Anat., Physiol. Sci. & Radiol., SVM 4700 Hillsborough St., Box 8401; 5048-C Edwards Mill Rd., 27612	829-4267	781-9179
Berardinelli, Paula K., Health Educ., Health Serv. Clark Inf., Room 409, Box 7304; 3221-C Walnut Crk. Pkw. S., 27606	2563	859-2203
Bereman, Dr. Robert D., (Barbara), Assoc. Dean, Acad. Aff. & Prof., Chem., Phys. & Math. Sci. 122-A Cox, Box 8201; Rt. 5, Box 92, 27502	7833	362-9276
Berenson, Dr. Sarah B., (David), Coord., Ctr. for Res., Math. & Sci. Educ. 326 M. Poe, Box 7801; 1513 Dellwood Dr., 27607	2238	787-2298
Berger, Dr. Knute E., (Margaret), Adj. Prof., Text. Engr. & Sci. 15124 Sunrise Dr. NE, Bainbridge Is., WA 98110	206-842-6017	
Berger, Dr. Roger L. (Vicki), Assoc. Prof., Stat. 518-C Cox, Box 8203; 1122 Knollwood Dr., Wilson 27893	2541	291-9516
Bergeron, Norma B., RN, Health Serv. Clark Inf., Box 7304; 109 Pineland Cir., 27606	2562	851-4693
Berkhoff, Dr. Herman A., Prof., Micro., Path., & Parasit., SVM 4700 Hillsborough St., Box 8401; 3325 Manor Ridge Dr., 27603	829-4200	779-3049
Berkstresser, Dr. Gordon A., (Patricia), Prof. & Dept. Head, Text. Mgmt. & Tech. 1422 Nelson, Box 8301; Rt. 2, Box 24A, Wake Forest 27587	3442	556-6488
Berle, A. Lynn, Asst. Prof., Phys. Educ. 2040 Carmichael, Box 8111; 2616 Hiking Trail, 27609	2487,2488	846-0468
Bermudez, Dr. Alex J., Intern, Avian Med. Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401	829-4200	
Bernhard, Dr. Richard H., (Cynthia), Prof. & Grad. Admn., Ind. Engr. 342-A Riddick, Box 7906; 639 Smedes Pl., 27605	2362	834-7020
Berry, Ellen, Analyst Prog., Comp. Ctr. 1309 Library, Box 7109; Rt. 15, Box 85-E, 27612	2517	847-3489
Berry, Hardy D., (Ann T.), Asst. Vice Chan., Comm., Chan. Off. & Univ. Relations 9A Holladay, Box 7505; 2601 Wells Ave., 27608	2850	787-6587
Berschneider, Dr. Helen M., Asst. Prof., Anat., Physiol. Sci. & Radiol. ... 4700 Hillsborough St., Box 8401	829-4220	
Bertness, Scott G., (Nancy W.), Mgr., Univ. Graphics Sullivan Dr., Box 7226; 208 Farmington Woods Dr., Cary 27511	2131	469-5050
Bessard, Brenda D., (Harold), Dir. of Nursing Serv., Health Serv. Clark Inf., Box 7304; 702 St. George Rd., 27610	2562	832-4823
Best-Nichols, Barbara, Head, Text. Libr. 112 Nelson, Box 8301	3043	
Bethea, Preston, Jr., Mgr., Int. Audit. B Holladay, Box 7202; 142 Luther Rd., 27610	3289	832-9484
Betler, Pamela J., Acct. Clk., Agri. & Life Sci. 120 Patterson, Box 7601; 401 Center St., Apex, 27502	2715	
Bettis, Jerry L., (Mattie), Instr., For. 1022J Biltmore, Box 8002; 1241 Somerset Rd., 27610	3181	821-2864
Betts, Dr. Charles W., Prof., Comp. Ani. & Sp. Species Med., SVM 4700 Hillsborough St., Box 8401; 27606	829-4233	
Betts, Dr. Leonidas J., Assoc. Prof., Engl. 241 Tompkins, Box 8105; Old Duncan Rd., Rt. 1, Fuquay-Varina 27526	3353	552-4845

Name, Title, Department and Address	Office Phone	Resid. Phone
Betts, Wiley F., Res. Tech., Biochem. 138 Polk, Box 7622; 2414 Mayview Rd., 27607-6913	2581	832-1166
Beute, Dr. Marvin K., (Sherlene), Prof., Plant Path. 2618 Gardner, Box 7616; 4104 Picardy Dr., 27612	2737	782-4547
Bevis, Dr. Michael, (Terry), Asst. Prof., Mar., Earth & Atmos. Sci. 110E Withers, Box 8208; Rt. 6, Box 338, Chapel Hill 27514	7917	942-1063
Bewley, Dr. Glenn C., (Alison), Prof., Gen. 3613 Gardner, Box 7614; 1229 Sturdivant Dr., Cary 27511	2285	469-1857
Bhattacharyya, Dr. Bibhuti B., (Helen), Prof., Stat. 604-A Cox, Box 8203; 3325 Horton St., 27607	2535	787-8634
Bianchi, Gail E., Sec., Text. 107-A Nelson, Box 8301; 2811 Broadwell Dr., 27606	3058	828-7845
Bickel, (CPT) William G., (Pat), Asst. Prof., Mil. Sci. 154 Coliseum, Box 7309; 7200 Ashley Dr., 27604	2428	876-7634
Bickett, D. Mark, (Ruth), Bio. Lab. Tech., Crop Sci. 3127 Ligon St., Box 7631; 2818 Bedford Ave., 27607	3905	834-7629
Biddy, O. David, Jr., Elect. Tech., Nuc. Engr. 3115 Burlington, Box 7909; 542 Granite St., 27603	2298	832-2374
Bierley, Sarah T., (Bo), Res. Tech., Anat., Physiol. Sci. & Radiol., SVM 4700 Hillsborough St., Box 8401; 104 Robin Rd., Chapel Hill 27514	829-4200	942-4047
Bierly, Darryl W., (Carol), Asst. Vice Chan. for Fin., Fin. & Bus. B Holladay, Box 7201; 6321 Lakeland Dr., 27612-5101	2143	846-8883
Biggs, Lisa D., Sgt., Public Safety Field House, Box 7220	3206	
Bilbro, Dr. Griff L., (Carla), Res. Assoc., Ctr. for Comm. & Signal Proc. 309 Daniels, Box 7911; 309 Middleton, Cary 27511	2336	467-8930
Bilderback, Dr. Theodore E., (Linda), Assoc. Prof., Hort. Sci. 154 Kilgore, Box 7609; 3518 Carriage Dr., 27612	3133	787-5535
Billingsley, Page, Admn. Asst., Physical Plant 100 Morris, Box 7219	2181	
Bilyj, Stephen J., (Alene), Chief, Reactor Maint., Nuc. Reactor Prog. 2123 Burlington, Box 7909; 2809 Greenock Dr., 27604	2322	876-1793
Bingham, Dr. William L., (Annette), Assoc. Prof., Civil Engr. 314 Mann, Box 7908; 3117 Leonard St., 27607	2331	787-1775
Binz, Jane C., (Whitney), Med. Tech., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 108 Rosebrooks Dr., Cary 27511	829-4200	467-7206
Bir, Richard E., (Susan), Ext. Spec., Hort. Sci. Mtn. Hort. Crops Res. Sta., 2016 Fanning Bridge Rd., Fletcher 28732-9628 ...		704-684-3562
210 Grove St., Brevard 28712		704-884-9387
Bireline, George L., (Jenny), Prof. Emer., Design 201E Leazar, Box 7701; 228 E. Park Dr., 27605	3260	833-8033
Bishir, Dr. John W., Prof., Math. 249 Harrelson, Box 8205; 305 W. Park Dr., 27605	2598	832-2905
Bishop, Dr. Paul E., (Lola), Asst. Assoc. Prof., USDA, Microb. 4627-C Gardner, Box 7615; 11 ⁷ Brooks Ave., 27607	3770	833-9867
Bissette, Christine W., Libr. Clk., Circ. Library, Box 7111; 1010-A Dorothea Dr., 27603	3364	834-3158
Bissonnette, Dr. Kevin, Resid., Sm. Ani., Surgery, SVM 4700 Hillsborough St., Box 8401	829-4200	
Bivins, H. Douglas, (Catherine), Lab. Ani. Tech., Lab. Ani. Res., SVM ... 4700 Hillsborough St., Box 8401; 107 Vineyard Ln., Cary, 27511	829-4201	469-1080
Bizios, Georgia, Vis. Lect., Arch 302 Brooks, Box 7701	2205	
Black, Dr. Betty L., Assoc. Prof., Zool. 1630 Gardner, Box 7617; 5104 Carter St., 27612	2309	783-8237
Black, Dr. Chester D., (Lucy K.), Assoc. Dean & Dir., Agri'l. Ext. Serv. 104 Ricks, Box 7602; 600 Sampson St., 27609	2811	782-5259
Black, William D., (Tina), Maint. Mech., Phys. Plant Armory Shops, Box 7219; Rt. 3, Box 171, Fuquay, 27526	3080	552-9340
Black, William H., (Barbara B.) Maint. Mech., Ext. 4-H & Youth Dev. ... Rt. 3, Box 5-A; Reidsville, 341 Sunset Dr., Eden, 27288	349-9445	627-1834
Blackmon, Theron D. (Norma), Dairy Plant Oper., Food Sci. 12 Schaub, Box 7624; Rt. 1, Box 133 A, Clayton 27520	2760	934-5444

Name, Title, Department and Address	Office Phone	Resid. Phone
Blair, Lynne A., (Neal), Acct. Tech., Fund Acct.	3587	782-8707
213 Admn. Serv. Ctr., Box 7205; 2610 Grant Ave., 27608		
Blair, Dr. Neal E., (Lynne), Asst. Prof., Mar. & Atmos. Sci.	7883	782-8707
132 Withers, Box 8208; 2610 Grant Ave., 27608		
Blake, Dorothy S., (Gary Wilson), Libr. Asst., Docu.	3280	834-2903
2109 Library, Box 7111; 3508 Neil St., 27607		
Blake, Russell G., Asst. Equip. Mgr., Athl.	3956	833-3711
146 Weisiger-Brown Athl. Fac., Box 8502; 1825 Reaves Dr., 27608		
Blalock, Doretha J., Libr. Tech. Asst., Acqs., Libr.	3187	
3120 Library, Box 7111; 908 Seabrook Rd., 27610		
Blalock, Jerry A., (Mazie), Aud. Supv., Dairy Rec. Proc. Ctr.	2632	563-5166
Leazar, Box 7623; Rt. 2, Box 350, Efland 27243		
Blalock, Nancy P., LPN, Health Serv.	2562	552-9282
Clark Inf., Box 7304; 7940 Panther Lk. Rd., 27592		
Blalock, Dr. Thomas C., (Cornelia), Dir. Emer., Agri'l. Ext. Serv.		787-5909
1315 Brooks Ave., 27607		
Blalock, Dr. Thomas J., (Martha), Asst. Prof. Emer., Chem.		787-6157
3504 Churchill Rd., 27607		
Bland, George F., (Barbara), Assoc. Dean, Engr.	3693	
116 Page, Box 7904; 408 Farmstead Dr., Cary 27511		
Bland, Herbert S., III, Engr. Res. Tech., Bio. & Agri'l. Engr.	3101	851-6440
116 Weaver, Box 7625; 601 G Charleston Rd., 27606		
Bland, Michael B., Mach. Oper., Phys. Plant	3800	
Recla. Ctr., Box 7219; Rt. 2, Knightdale, 27545		
Bland, William T., (Mary), Agri'l. Res. Tech., Hort. Sci.	675-2314	
Rt. 2, Box 610, Castle Hayne 28429; 5825 Park Ave., Wilmington 28403		
Blank, Gary B., (Deborah), Lect., For.	2891	782-1240
3035 Biltmore, Box 8002; 813 Lake Boone Tr., 27607		
Blank, Dr. Philip E., (Mary Alice), Prof., Engl.	3863	787-8928
212 Tompkins, Box 8105; 3705 Arbor Dr., 27612		
Blankenhorn, Dena P., (Bruce), Sec., Dean's Off., Hum. & Soc. Sci.	2467	847-7113
106 Link Bldg., Box 8101; 6208 Dresden Ln., 27612		
Blankenship, Dr. Sylvia M., (Jim), Asst. Prof., Hort. Sci.	3166	851-5042
252 Kilgore, Box 7609; 5105-D Vann St., 27606		
Blankinship, Lynn D., (Paul), Admn. Sec., Car. Plan. & Place. Ctr.	2396	833-3252
28 Dabney, Box 7303; 2509 Vanderbilt Ave., 27607		
Blankinship, Paul R., (Lynn), Ocean. Field Oper. Mgr., Mar., Earth & Atmos. Sci.	7867,7911	833-3252
132 Withers, 1321 Varsity Dr., Box 8208; 2509 Vanderbilt Ave., 27607		
Blazich, Dr. Frank A., (April), Prof., Hort. Sci.	3166	851-8079
270 Kilgore, Box 7609; 806 Merwin Rd., 27606		
Bllell, Edward G., Lab. Mech., Text. Mgmt. & Tech.	3077	
323 Nelson, Box 8301; P.O. Box 12541, 27605		
Blessis, Dr. George H., (Janice), Assoc. Prof., Civil Engr.	2331	782-3803
215 Mann, Box 7908; 2601 Ridge Rd., 27612		
Blevins, Marsha H., Budg. Clk., SVM	829-4200	
4700 Hillsborough St., Box 8401		
Blinson, Joseph L., (Edna), HVAC Mech., Phys. Plant	3080	553-6454
Armory, Box 7219; 905 E. Joynes St., Clayton, 27520		
Bliss, Gurdine L., Libr. Asst., Libr. Reserve Rm.	2597	833-8994
1320 Library, Box 7111; 2726 Van Dyke Ave., 27607		
Bliss, Milton C., (Janice), Asst. Dir., Music	2981	783-5679
207 Price Music Ctr., Box 7311; 4100 306-C Sedgewood Dr., 27612		
Block, Dr. William J., (Miriam), Prof. Emer., Pol. Sci. & Pub. Admin.	2481	851-4781
207 Link Bldg., Box 8102; 5227 Melbourne Rd., 27606		
Bloomfield, Dr. Peter, Prof., Stat.	2541	833-8785
518-A Cox, Box 8203; 500 Polk St., 27604		
Blount, Geraldine B., (James), Hskp. Asst., Phys. Plant	3323	828-2310
Park Shops, Box 7219; 1419 Raleigh Blvd., 27610		
Blount, Matilda H., (James), Supv., Univ. Dining	3270	828-9603
Erdahl-Cloyd Annex, Box 7307; 512 Chamberlain St., 27607		
Blue, Gloria M., (Fred), Clk.-Typ., Pol. Sci. & Pub. Admin.	2481	542-2865
211 Link, Box 8102; P.O. Box 121, Moncure, 27559		

Name, Title, Department and Address	Office Phone	Resid. Phone
Blue, James E., (Kathy), Electronics Tech., Bio. & Agri'l Engr.	3101	894-5216
123-A Weaver, Box 7625; Rt. 1 Box 287-B, Angier, 27501		
Blue, Dr. Nelson A., Vis. Asst. Prof., Comp. Sci.	7896	851-0721
242-F Daniels, Box 8206; 1930-208 Eyrie Ct., 27606		
Blue, Theresa A., Lab. Mgr., Bio. Sci.	3730	833-0038
3701 Bostian, Box 7611; 1508 Stovall Dr., 14, 27606		
Blum, George B., Jr., (Barbara), Prof., Bio. & Agri'l. Engr.	2694	851-6781
111 Weaver, Box 7625; 1408 Trailwood Dr., 27606		
Blum, Dr. Udo, (Mary Ann), Prof., Bot.	2725	851-4983
4217 Gardner, Box 7612; 708 Merrie Rd., 27606		
Blumer, Dr. Thomas N., (Ruth), Prof. Emer., Food Sci.		851-3068
Box 7624; 350 Meredith St., 27606		
Boal, Robert S., (Ruth), Assoc. Prof. Emer., Ec. & Bus.		556-4323
121 W. Sycamore, Wake Forest 27587		
Bockelman, Mark A., (Dawne), Asst. Dir., Sports Info., Athl.	2102	467-7138
Case Athl. Ctr., Box 8501; 411 Holtz Lane, Cary 27511		
Bogan, Michael L., Agri'l. Res. Tech., Ani. Sci.	2761	851-5362
118 Polk, Box 7621; 1800-202 Avent Ridge Rd., 27606		
Bogdan, John F., (Anne), Prof. Emer., Text. Engr. & Sci.		787-4402
2120 Ridge Rd., 27607		
Bolduc, Nina M., Text. Res. Tech., Text. Engr. & Sci.	3074	851-4090
B-5 Nelson, Box 8301; 3101-G Aileen Dr., 27606		
Boles, Geraldine P., (J. W.), Admn. Asst., Microb.	2391	467-6905
4515 Gardner, Box 7615; 1210 Highland Tr., Cary 27511		
Boles, Dr. Michael A., (Sylvia), Assoc. Prof., Mech. & Aero. Engr.	3024	782-0789
3184 Broughton, Box 7910; 509 Peachwood Pl., 27609		
Bolick, Mildred O., (Keith), Sec., Plant Path.	2721	851-8086
2403 Gardner, Box 7616; 5310 Grovewood Pl., 27606		
Bonaminio, Dr. V. P., (Paula), Assoc. Prof., Hort. Sci.	3113	851-3876
164 Kilgore, Box 7609; 334 Wilmot Dr., 27606		
Bonanno, Dr. A. Richard, (LuAnne), Asst. Prof., Hort. Sci.	3322	467-7603
168 Kilgore, Box 7609; 109 Brannigan Pl., Cary 27511		
Bonesteele, Parke L., (Vicky), LT, USN, Instr., Naval Sci.	2907, 2908	942-8398
104, 304 Reynolds Coliseum, Box 7310; 218 #21 Conner Dr., Chapel Hill, 27514		
Bonham, Dr. Julia C., Asst. Prof., Univ. Stud./Assoc. Hist.	2479	832-2567
148 Harrelson, Box 7107; 317 S. Boylan Ave., 27603		
Bonner, Cynthia P., (Fred), Dir. Resid. Life, Housing & Resid. Life	2406	782-4568
208 Harris, Box 7315; 3144 Merrienne Dr., 27607		
Bonner, John R., Lect., Phys. Educ.	3161	781-6665
2012 Carmichael, Box 8111; 1623 Dixie Trail 27607		
Bonnewell, Donald L., (Karen), Asst. Mgr., Book Div., SSS	3117	362-5061
SSS, Box 7224; Rt. 2, Box 124-A, Apex 23502		
Boone, Dr. Edgar J., (Ethel), Asst. Dir., Dept. Head, Agri'l. Ext., Adult & Comm. Coll. Educ.	2707	787-3486
120 Ricks, Box 7607; 4918 Rembert Dr., 27612		
Boone, Edna C., (George), Cust. Serv. Supv., SSS	2161	848-3561
SSS, Box 7224; 2701 Farnborough Rd., 27612		
Boone, Ella Ruth, Baker, Univ. Dining	2021	772-6590
Univ. Stu. Ctr., Box 7307; 1513 Wiljohn Rd., Garner 27294		
Boone, Naomi, Hskp. Asst., Phys. Plant	3323	828-2014
Park Shops, Box 7219; 306 Linden Ave., 27601		
Boone, William T., Litho., Univ. Graphics	2131	
Sullivan Dr., Box 7226; Rt. 1, Box 299D, Holly Springs 27540		
Boos, Dr. Dennis D., (Kathy), Assoc. Prof., Stat.	2541	787-2321
519 Cox, Box 8203; 3301 Boulder Ct., 27607		
Borden, Michael R., (Betsy), Asst. Dir., Stu. Dev.	2441	782-7275
220 Harris, Box 7314; 3625 Mill Run Rd., 27612		
Borden, Dr. Robert C., (Ann), Asst. Prof., Civil Engr.	2331	
Box 7908		
Borden, Dr. Roy H., (Laura), Assoc. Prof., Civil Engr.	2331	781-3838
319-C Mann, Box 7908; 3116 Chancery Pl., 27607		
Borland, (CPT) J. Michael, (Julie), APMS, Mil. Sci.	2428	876-5597
154 Reynolds Coliseum, Box 7309; 4900-A Pence Ct., 27604		

Name, Title, Department and Address	Office Phone	Resid. Phone
Borrelli, Wanda, (Gerald), Supv., O.R., Vet. Teach. Hosp., SVM .....829-4200 4700 Hillsborough St., Box 8401; 218 Winding Ridge Dr.		362-4804
Boss, Dr. Charles B., (Wendy), Assoc. Prof., Chem. ....3412 617 Dabney, Box 8204; 8621 Caswell Ct., 27612		848-4739
Boss, Dr. Wendy F., (Charles), Assoc. Prof., Bot. ....3496 4201-A Gardner, Box 7612; 8621 Caswell Ct., 27612		848-4739
Bost, James L., (Betty), Tech., Design Shop .....2204 117-E Brooks, Box 7701; 1512 Delmont St., 27606		851-5475
Bostian, Dr. Carey H., (Neita), Chan. Emer. & Prof. Emer., Gen. ....2292 Gardner, Box 7614; 111 Carol Woods, Chapel Hill 27514		942-3763
Bostic, Nettie M., Hskp. Asst., Phys. Plant .....3323 Park Shops, Box 7219; Rt. 2, Box 410, Wake Forest, 27587		266-3978
Bostick, Dr. George W., (Dee), Coord., Agri'l. Comm. ....3971 2318 Library, Box 7603; 12509 Stonemill Way, 27614		847-6806
Bottcher, Dr. Robert W., Asst. Prof., Bio. & Agri'l. Engr. ....3121 176 Weaver, Box 7625; 4 Friendly Dr., 27607		834-6636
Botvinick, Risa D., (Ira), Lect., Engl. ....3870 232 Tompkins, Box 8105; 7815 Haymarket Lane, 27609		
Bowden, Dr. Edmond F., Asst. Prof., Chem. ....7069 620 Dabney, Box 8204; 3113-G Aileen Dr., 27606		859-0147
Bowen, Arneice H., (Linwood), Librn., Monographic Cat. ....2603 1121 Library, Box 7111; 3713 Edwards Mill Rd., 27612		787-6952
Bowen, Francis R., Supt., Auto. Serv., Phys. Plant .....2179 Motor Pool Bldg., Sullivan Dr., Box 7219		
Bowen, Dr. Henry D., (Jean C.), Prof., Bio. & Agri'l. Engr. ....3121 157 Weaver, Box 7625; 2200 Charlotte Ct., 27607		787-8349
Bowen, Dr. Lawrence H., Prof., Chem. ....2995 836 Dabney, Box 8204; Rt. 8, Box 190, Lake Anne, 27612		787-9869
Bowen, Mark L., (Beverly), Graph. Design., Text. Ext. ....3761 201-D Nelson, Box 8301; P.O. Box 27683, 27695		467-3330
Bowen, Nancy A., Acct. Tech., Capital Assets Acct. ....2148 213 Admn. Serv. Ctr., Box 7205; 5643 Hamstead Crossing Dr., 27612		787-0880
Bowers, Dr. Crowell G., Jr., (Jane P.), Asst. Prof., Bio. & Agri'l. Engr. ....2694 108 Weaver, Box 7625; 7208 Ebenezer Church Rd., 27612		782-2515
Bowers, Henry, (Sory G.), Assoc. Vice Chan., Stu. Aff. ....2452 3111 Univ. Stu. Ctr., Box 7306; 3426 Bradley Pl., 27607		787-6408
Bowers, Pat D., Art.-Illus., Mar., Earth & Atmos. Sci. ....3716 214 Withers, Box 8208; 336 Dry Ave., Cary 27511		467-9965
Bowles, Donald H., Sys. Analyst, Comp. Ctr. ....2517 1307 Library, Box 7109; 6221-O North Hills Dr., 27609		847-2057
Bowles, Stephanie M., Tech., Micro., Path. & Parasit., SVM .....829-4390 4700 Hillsborough St., Box 8401; 1120 Apex Macedonia Rd., 27511		851-7803
Bowles, Walter W., Elect., Athl. ....2108 116 Reynolds Coliseum, Box 8501; 8108 Buckskin Ln., 27502		779-6772
Bowman, Anne G., (Bruce), Libr. Tech. Asst., Acid Depos. Prog., For .....3520 1509 Varsity Dr., Box 7632; 28 Hawthorne Dr., Durham, 27712		383-2383
Bowman, Dr. Daryl T., (Julie), Asst. Prof., Crop Sci. ....2827 3709 Hillsborough St., Box 8604; 2729 Scottsdale Ln., 27612		847-8424
Bowman, Dr. Karl F., (Gale G.), Asst. Prof., Equ. Surgery, SVM .....829-4243 4700 Hillsborough St., Box 8401; 448 Sandwood Ct., 27612		843-8861
Bowman, Worth B., III, Rad. Survey Tech., Rad. Prot. ....2894 214 Clark, Box 7108		755-1413
Boyd, Dr. Leon C., (Lillie), Asst. Prof., Food Sci. ....2956 116E Schaub, Box 7624; 1308 Swallow Dr., 27606		851-6947
Boye, Sam W., (Grace), Res. Tech., Food Sci. ....2965 235 Schaub, Box 7624; 408 Hillstone Dr., 27609		847-8059
Boyer, Elizabeth P., Agri'l. Res. Tech., Plant Path. ....2735 2610 Gardner, Box 7616; Rt. 3, Box 207, Zebulon 27597		269-6841
Boyers, Albert S., (Carol), Undergrad. Admin., Mech. & Aero. Engr. ....2368 3179A Broughton, Box 7910; 3320 Boulder Ct., 27607		787-0045
Boyette, Michael D., (Diane), Ext. Spec., Bio. & Agri'l. Engr. ....2675 210 Weaver, Box 7625; P.O. Box 367, Wendell 27591		365-5658
Boyette, Percy G., (Bonnie), Agri'l. Res. Tech., Crop. Sci. Ext. ....3633 1215 Williams, Box 7602; 2300 Loop Rd., Clayton 27520		553-4094

Name, Title, Department and Address	Office Phone	Resid. Phone
Boyette, Walter H., (Sally), Maint. Supv., Phys. Plant McKimmon Ctr., Box 7219; 2051 Bobbit Rd., Clayton, 27520	2277	553-7492
Boykin, Ashley V., Const. Est., Phys. Plant. 6 Morris, Box 7219; 7906 Leesville Rd., 27612	2184	
Boykin, Norma M., (Nathaniel), Nurse, Health Serv. Clark Inf., Box 7304; 323 Golf Course Dr., 27610	2564	832-0700
Boykin, Thomas L., Floor Maint. Asst., Phys. Plant Park Shops, Box 7219	3323	
Bracey, Mary L., Clk. Agri'l. Comm. G-1 Ricks, Box 7603; 654 Chappell Dr., 27606	2861	755-1424
Brackett, Gail W., Med. Off. Asst., Health Serv. Clark Inf., Box 7304; 3208 Idlewood Vlg., 27610	2654	
Brackin, Thomas L., (Sonja), Reactor Safety Spec., Nuc. Engr. 1220 Burlington, Box 7909; 5504 Balsam Pl., 27603	3385	779-1486
Bradbury, Dr. Phyllis C., (Robert A. Douglas), Prof., Zool. 1637 Gardner, Box 7617; 205 Park Ave., 27605	2592	834-9217
Bradford, Edward H., Assoc. Prof. Emer., Text. 4304 Galax Dr., 27612		787-1600
Bradford, Joanne, Hskp. Asst., Phys. Plant Park Shops, Box 7219; Rt. 1, Box 325, Youngville, 27596	3323	556-3850
Bradford, Judy C., (Ray), Acct. Tech., Phys. Sci. Res. 114 Cox, Box 8201; 1305 Broken Branch Ct., 27610	7865	833-7923
Bradley, Dr. J. R., (Beverly), Prof., Ent. Res. Annex West-A, Box 7630; 6101 Splitrock Tr., Apex 27502	3579	779-4773
Bradley, Lawrence B., (Barbara), Asst. Dir., Oper., Phys. Plant. 109 Morris, Box 7219; 3406 Scott Dr., 27604	2188	876-9825
Brady, Dianne S., Acct. Clk., Acct. Pay. 213 Admn. Serv. Ctr., Box 7204; Rt. 2, Box 300, Selma, 27576	2158	965-5847
Brady, Mary Ellen, (Ronald E.), Libr. Asst., Curr. Mat. Ctr. 400 Poe, Box 7801; 1818 Medfield Rd., 27607	3191	851-4220
Brady, R. Allen, (Dianne), Mgr., Stu. Affrs. Unit, Admn. Comp. Serv. B-21 Hillsborough Bldg., Box 7209; Rt. 2, Box 300, Selma, 27576	2794	965-5847
Brady, Thomas M., Comp. Programmer, Admn. Comp. Serv. 14 Peele, Box 7208; 25 Bashford Apt. B, 27606	3110	859-1099
Brafford, Patricia A., Sec., Housing & House Furnishings 210 Ricks, Box 7605; 1606 Bickett Blvd., 27608	2770	821-4989
Bragg, Arnold W., (Martha), Comp. Coord., Agri'l. Admin. 1 Patterson, Box 7601; 409 Cedar Hill Ln., 27609	3609	787-1904
Braham, Dr. Richard R., Asst. Prof., For. 2022D Biltmore, Box 8002; P.O. Box 37088, 27627	2891	832-6621
Brake, Dr. John T., (Audrey), Assoc. Prof., Poul. Sci. 9-A Scott, Box 7608; 1123 Brucefont Dr., Garner 27529	2628	779-2458
Branch, Coy H., Park. Control Off., Trans. Admn. Serv. Ctr., Box 7221	3424	
Brandberg, William S., (Doris), Tech., Engr. Res. Serv., Ind. Engr. Park Shops, Box 7906; 714 Glascock St., 27604	3661	833-9640
Brandenburg, Dr. Rick L., (Janice), Asst. Prof., Ent. 3308 Gardner, Box 7613; 7116 Jeffrey Dr., 27603	2697,2703	779-0334
Brandon, Phyllis K., Sec., Purch. & Stores Alumni, Box 7212; 5204 Amsterdam Pl., 27606	2171	362-7409
Brandt, James B., Boiler Oper. Phys. Plant 4700 Hillsborough St., Box 8401; 2408 Glascock, 27610	829-4216	828-6931
Brandt, Marilyn M., (James), Asst. Prof. & Asst. Head, Engrl. 131-F Tompkins, Box 8105; 707 Beaver Dam Rd., 27607	3353	828-2431
Brandt, Mary K., Sec., Prog. Off., Univ. Stu. Ctr. 3114 Univ. Stu. Ctr., Box 7306; Cameron Ct. Apts., 27603	2451	833-9860
Brannon, Dr. Yevonne S., Applied Res. Mgr., Urb. Aff. 273 McKimmon, Box 7401; 1400 Lorimer Rd., 27606	3211	851-2805
Branoff, Theodore J., Vis. Lect., Graphic Comm., Occup. Educ. 510-C Poe, Box 7801; 601 Coventry Dr., Zebulon 27597	2234	269-6569
Brantham, Danette M., (Mark C.), Clk.-Typ., Crop Sci. 1239 Williams, Box 7620; Rt. 14, Box 131-B, Goldsboro 27530	2704	734-7942
Brantley, Carol B., (Tom), Clk.-Typ., Admn. Comp. Serv., Data Proc. 12 Peele, Box 7208; 7809 Netherlands Dr., 27606	2459	362-6855

Name, Title, Department and Address	Office Phone	Resid. Phone
Brantley, John C., III, (Marilyn), Adj. Asst. Prof., Civil Engr. 208 Mann, Box 7908; 3116 Cartwright Dr., 27612		782-3724
Brantley, Joy W., (Douglas), Clk. Typ., Mar., Earth & Atmos. Sci. 214 Withers, Box 8208; 1005 Laura Duncan Rd., Apex 27502	3711	362-8877
Brantley, Peggy Y., Sec., Crop Sci. 840 Method Rd., Unit 3, Box 7629; Rt. 4, Box 65X, Apex 27502	3281	362-4343
Braswell, Ada R., (L. P.), N. Campus Bookshop Supv., SSS Erdahl-Cloyd Annex, Box 7224; 4212 James Rd., 27604	3831	876-6444
Braswell, Charles C., (Julia), Dir., Phys. Plant 100 Morris, Box 7219; 1309 Glen Eden Dr., 27612	2181	781-3627
Braswell, Ethel L., (Edward), Clk. Typ., Univ. Res. Unit 2 3720 Lake Wheeler Rd., Box 7601; 900 Merrie Rd., 27606	2759	851-5274
Braxton, Claire S., (J. Franklin), Libr. Asst., Acqs. Libr. 3108 B Library, Box 7111; 3417 Trinity Farms Rd., 27607	3188	834-6579
Bray, Billie Jo, Acct. Clk., Acqs., Libr. 3134 Library, Box 7111; 2209 Nancy Ann Dr., 27607	3833	787-6961
Bray, Thomas C., (Audrey), Reac. Oper. Mgr., Nuc. Engr. 2126 Burlington, Box 7909; 5200 Avent Ferry Rd., 27606	2323	851-4484
Brazeal, William D., (Katherine), Asst. Dir., Phys. Plant 4700 Hillsborough St., Box 7219; 343 S. Allen St., Wake Forest 27587	829-4217	556-1448
Bream, Karen B., Libr. Asst., Monographic Cat. Library, Box 7111; 3201 Skycrest Dr., 27604	2603	876-1055
Bredenbergh, Dr. Paul A., (Gladys), Prof. Emer. of Phil., Phil. & Rel. Box 8103; 1600 Crump Rd., 27606	2477	851-6786
Breedlove, Marshall R., (Kimberly A.) HVAC Mech., Phys. Plant Armory, Box 7219; 2224 Henslowe Dr., 27603	3080	839-5769
Breedlove, Michael L., Lab. Mech., Mech. & Aero. Engr. 2102 Broughton, Box 7910; 1109 Polo Dr., 27603	2365	772-5242
Breedlove, Phyllis A., Sec., Physics 104 Cox, Box 8202	2521	
Breitschwerdt, Dr. Edward B., (Anne), Assoc. Prof., Comp. Ani. & Sp. Species Med., SVM 4700 Hillsborough St., 27606; Box 8401; Box 342 A, Rt. 3, Fuquay-Varina 27526	829-4234	552-3287
Bremson, Thomas E., (Arlene), Libr. Asst., Ref. 1140 Library, Box 7111; 2300 Avent Ferry Rd., 27606	2935	833-5154
Bretting, Dr. Peter K., Res. Assoc., Crop Sci. 1236 Williams, Box 7620; 4339 Avent Ferry Rd., Apt. 1, 27606	2704	851-3729
Brettmann, Lelia S., (William), Learning Disability Coord., Counseling Ctr. 200 Harris, Box 7312; 4029 Balsam Dr., 27612	7653	781-0812
Brettmann, Wm. S., Episcopal Chaplain, Coop. Campus Min. 1200 Univ. Stu. Ctr., Box 7306; 4029 Balsam Dr., 27612	2414	781-0812
Breuhaus, Dr. Babetta A., Asst. Prof., Equ. Surgery, Food Ani. & Equ. Med., SVM 4700 Hillsborough St., Box 8401	829-4247	
Brewer, Charles E., (Nancy), Ext. Turkey Spec., Poul. Sci. Ext. 211 Scott, Box 7608; 6209 Arrington Rd., 27607	2621	851-0145
Bricio, Martha B., Sec., For. Resou. 216 Research Annex West, Box 8007	7665	
Brickhouse, Charles M., Dist. Ext. Chm. Emer. 1013 Harvey St., 27608		828-1585
Bridger, Lynne M., (Jim), Acct. Tech., Found. Acct. & Invest. B Holladay, Box 7207; 603 E. Park St., Cary 27511	2110	469-0105
Bridgers, Kathy B., (Paul T.), Acct. Clk., Nuc. Engr. 1112 Burlington, Box 7909; 2037 Simpkins Rd., 27603	2301	
Bridges, Carolyn F., (Gerald), Sec., Tob. Lit. Serv. 2314 Library, Box 7111; 8204 Lakeshore Dr., Garner 27529	2836	772-8398
Bridgwater, Dr. Floyd E., (Claire), Prof., USFS/For. 1019 Biltmore, Box 8002; 4504 Boxwood Rd., 27612	3168	782-0134
Brierley, Melba H., (Paul), Sys. Analyst, Admn. Comp. Serv. B21 Hillsborough Bldg., Box 7209; 607 Hobson Wood Ct., Garner 27529	2794	
Briggs, Dr. Garrett, (Sue), Dean, Phys. & Math. Sci. 118 Cox, Box 8201; 3508 Ranlo Dr., 27612	7277	782-7454

Name, Title, Department and Address	Office Phone	Resid. Phone
Bright, H. Ray, Chief Engr., UNC Ctr. for Pub. TV TV Ctr., Box 8601; 1623 Trailwood Dr., 27606	2853	851-7380
Brinkley, James D., Hskp. Supv., Phys. Plant Park Shops, Box 7219; P.O. Box 365, Spring Hope, 27882	3323	478-4403
Brinson, Martha K., (Bob), Publ. Coord., Engr. 7 Page, Box 7901; Rt. 5, Box 173, Green Level 27502	3394	
Brisky, Lauren J., (Gary Posner), Assoc. Vice Chanc., Fin. & Bus. B Holladay, Box 7201; 2801 Old Orchard Rd., 27607	2732	781-3683
Brisson, Dr. Robert C., Assoc. Prof., Soc. & Anth. 316 1911 Bldg., Box 8107; 1008C Sandlin Pl., 27606	3114	851-5911
Bristol, Dr. David G., (Susan), Asst. Prof., Food Ani. & Equ. Med., SVM 4700 Hillsborough St., Box 8401; 6905 A Glendower Rd., 27612	829-4286	781-8656
Britt, Barry J., Plumber, Phys. Plant Armory Shop, Box 7219; 3055 Lakeview Dr., 27603	3080	779-1808
Britt, Dr. Jack H., (Frances), Prof., Ani. Sci. 232C Polk, Box 7621; Rt. 4, Box 440A, 27606	2768	851-3677
Britton, Jean T., Acct. Clk., Text. B-3 Nelson, Box 8301; 1002 Buckingham Rd., Garner, 27529	2439	772-6993
Broadwell, Dr. Frances A., Psy. Counseling Ctr. 200 Harris, Box 7312; B-10 Villagegreen, Chapel Hill, 27514	2423	929-7542
Brockhaus, John A., (Linda), Res. Assoc., For. Box 8002; 13816 N. Meadow, Wake Forest, 27587	2891	
Brockhaus, Linda, (John), Clk.-Typ., Food Sci. 339 Schaub, Box 7624; 13816 N. Meadow, Wake Forest, 27587	2971	
Brockman, Grace W., Res. Tech., Poul. Sci. 3 Scott, Box 7608; 2612 Clark Ave., 27607	2628	834-1800
Brodie, Mozelle, Hskp. Asst., Phys. Plant Park Shops, Box 7219	3323	
Bronson, James D., Agri'l. Res. Asst., Poul. Sci. Poul. Res. Farm 6; F-8 Booker St., 27610	3446	828-1450
Bronson, Mariah L., Hskp. Asst., Phys. Plant Park Shops, Box 7219	3323	
Brooks, Dr. Eugene H., Lect., Ec. & Bus. 219E Hillsborough Bldg., Box 8110; 1809 Bellwood Dr., 27605	3886	828-3049
Brooks, Faye J., (Bill), Sec., Mar., Earth & Atmos. Sci. 216 Withers, Box 8208; Rt. 4, Box 269, 27606	3711	362-4005
Brooks, John C., Assoc. Dir., Empl. Serv., Human Resou. Admn. Serv. Ctr., Box 7210	2137	469-1845
Brooks, Dr. Joseph F., (Barbara), Assoc. State Ldr., Agri'l. Ext. 214 Ricks, Box 7602; 426 Pleasants Ave., Cary 27511	3252	469-9957
Brooks, R. Charles, (Betty), Ext. Prof. Emer., Ec. & Bus. 262 Venezia Ct., Punta Gorda, Fla. 33950	813-637-7999	
Brooks, Tassie T., (Winston), Admn. Asst., Acct. Pay. 213 Admn. Serv. Ctr., Box 7204; Rt. 4, Box 234-A, Wake Forest 27587	3152	556-1984
Brooks, Dr. Wayne M., (Julia), Prof., Ent. 2315 Gardner, Box 7613; 412 Myrtlewood Ct., 27609	3771	781-6546
Broome, Dr. Stephen W., (Paula), Asst. Prof., Soil Sci. 2222 Williams, Box 7619; 3421 Octavia St., 27606	2643	851-8562
Brothers, Joel V., (Peggy), Asst. Prof., Phys. Educ. 2010 Carmichael, Box 8111; 305 Cedar Crest Ct., 27609	2487	781-0694
Brouillard, Patsy A., (Les), Typ., Ec. & Bus. 201 Patterson, Box 8109; 228 Furches St., 27607	3273	832-3381
Brown, Ann E., (Robert Von Gruenigen), Co-Dir., Writing Asst. Prog., Engr. 118 Page, Box 7901; Rt. 4, Box 169A, Siler City 27344	3545	663-3862
Brown, Barbara L., (Edward), Hskp. Asst., Phys. Plant Park Shops, Box 7219; P.O. Box 28258, 27611	3323	
Brown, Bessie A., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 3012 Idlewood, 27610	3323	
Brown, Dr. Charlotte V., (Eugene W.), Curator of Art, Univ. Stu. Ctr. 4110 Univ. Stu. Ctr., Box 7306; 1206 Williamson Dr., 27608	3503	821-2741
Brown, Christopher H., (Lynette), Res. Unit Mgr., Ani. Sci. 3720 Lake Wheeler Rd., Box 7621; 2534 Lake Wheeler Rd., 27603	2674	828-6030

Name, Title, Department and Address	Office Phone	Resid. Phone
Brown, Edna R., (Walter N.), Acct. Clk., Plant Path. 2518 Gardner, Box 7616; 8104 The Hague, 27606	2735	362-5276
Brown, H. Larry, (Nancy), Asst. Prof., Phys. Educ. 2009 Carmichael, Box 8111; 8516 Holly Springs Rd., Apex 27502	2487	362-4234
Brown, Dr. Henry S., (Wilda), Prof., Mar., Earth & Atmos. Sci. 228B Withers; 2114 Buckingham Rd., 27607	7838	787-5020
Brown, Jackie C., (Charlie), Clk. Typ., Hist. 157 Harrelson, Box 8108; 1502 Miriam Ave., Garner 27529	3383	772-7589
Brown, James S., Asst. Prof., Social Work Prog., Soc. & Anth. 331 1911 Bldg., Box 8107; 705-406 Cardinal Gibbons Dr., 27606	3291	834-4931
Brown, Janette S., (Rick), Tech. Asst., Tech. Info. Ctr. Library, Box 7111; 5708 Lakehaven Dr., 27612	2830	848-2127
Brown, Jesse C., (Pat), Lab. Mech., Food Sci. 28 Schaub, Box 7624; 504 S. John St., Clayton 27520	2959	553-6621
Brown, Dr. Joe B., Jr., Coord., Spec. Projs., Urb. Aff. 210-G McKimmon Ctr., Box 7401; 1625 N. Harrison Ave., Cary 27511	3373	481-1520
Brown, John G., Lect., Engl. G-129 Tompkins, Box 8105; 918 W. Trinity Ave., Apt. 3. Durham 27701	3854	682-1809
Brown, Joseph, (Doris), Lab: Ani. Tech., Poul. Sci. 48 Scott, Box 7608; 107 Deepwood Cir., Garner 27529	2628	821-1552
Brown, Kathleen R., Asst. Head, Monographic Cat. 1121 Library	2603	
Brown, Lee, Sec., Rad. Prot. 214 Clark, Box 7108	2894	
Brown, Lisa M., Acct. Clk., Accts. Pay. 213 Admn. Serv. Ctr., Box 7204; 721 Dorothea Dr., Apt. D, 27603	2139	
Brown, Dr. Lois S., Ext. Assoc. Prof. Emer., Ext. Home Ec. 309 Ricks; 816 Carlisle St., 27610	2788	833-7896
Brown, Lum C., (Jessye), Grnhse. Supv., Phys. Plant Sullivan Dr., Box 7219; 3029 Poole Rd., 27610	3408	834-4721
Brown, Luther E., (Ruby), Agri'l. Res. Tech., Soil Sci. 3305 Williams, Box 7619; 3304 Yorkshire Ct., 27604	2635	876-4779
Brown, Mark, Soc. Res. Asst., Hum. Comp. Lab., Dean's Off. 110 Tompkins, Box 8101; 500 W. Park Dr., 27605	7880	834-4916
Brown, Dr. Marvin L., Jr., (Elizabeth), Prof. Emer., Hist. 134 Harrelson, Box 8108; P.O. Box 607, Garner 27529	2484	
Brown, Mary K., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 916 Seabrook Rd., 27610	3323	834-5666
Brown, Matthew T., Laborer, Phys. Plant Armory Shop, Box 7219; 210½ Bagwell St., Garner, 27529	3080	779-7823
Brown, Minnie M., (Charles I.), Ext. Prof. Emer., Adult & Comm. Coll. Educ., Home Ec. 2205 Candyflower Pl., 27610		833-5956
Brown, Otellia J., Hskp. Asst., Phys. Plant Park Shops, Box 7219; P.O. Box 546, Spring Hope, 27882	3323	478-3705
Brown, Paige, Hskp. Asst., Phys. Plant Park Shops, Box 7219	3323	
Brown, Richard E., Electronics Tech., Comp. Ctr. Hillsborough Bldg.	2517	
Brown, Steven M., Whse. Tech., N.C. Found. Seed Prod. 4025 Beryl Rd., Box 8603; 705-101 Cardinal Gibbons Dr., 27606	2821	828-2777
Brown, Dr. Talmage T., Jr., (Carol), Prof., Micro., Path. & Parasit.-SVM 4700 Hillsborough St., Box 8401; 216 Rosecommon Ln., Cary 27511	829-4258	469-9347
Brown, Thomas H., (Becky), Instr., Mech. & Aero. Engr. 3181 Broughton, Box 7910	2365	
Brown, Thomas R., (Gloria), Dir., Int'l Trade Ctr. 213 McKimmon, Box 7401; 1303 "The Oaks" Burning Tree Dr., Chapel Hill 27514	3793	968-1452
Brown, Wesley E., Elect., Phys. Plant 4700 Hillsborough St., Box 8401	829-4217	
Brown, William G., Jr., (Linda), Res. Tech., Crop Sci. (USDA) Ligon St., Box 7620; 415 Charles Ct., Cary 27511	2734	467-6830
Browne, Micou M., (Suzanne), Agri'l. Res. Tech., Ent. Ext. 1403 Varsity Dr., Box 7613; 24 Dixie Tr., 27607	2703, 2003	833-5181

Name, Title, Department and Address	Office Phone	Resid. Phone
Brownie, Dr. Cavell, (Cecil), Assoc. Prof., Stat. 608-B Cox, Box 8203; 3309 Horton St., 27607	2534	781-2943
Brownie, Dr. Cecil F., (Cavell), Asst. Prof., Anat., Physiol. Sci. & Radiol., SVM 4700 Hillsborough St., Box 8401; 3309 Horton St., 27607	829-4229	781-2943
Bruce, Edwina E., Res. Tech., Soil Sci. 3406 Williams, Box 7619; 7002-A Longstreet Dr., 27609	2600	847-0437
Bruck, Dr. Robert I., (Debra Sue), Assoc. Prof., Plant Path. & For. 2416 Gardner, Box 7616; 1301 Larkhall Ct., Cary 27511	2721	469-0195
Bruffey, Joyce B., (Dan), Sec., Soil Sci. 2224 Williams, Box 7619; 1621 Kenbrook Dr., Garner 27529	2643	772-7280
Bruneau, Dr. Arthur H., (Paula), Asst. Prof., Crop Sci. Ext. 2415 Williams, Box 7620; 3406 Arrowwood Dr., 27604	2246	872-1550
Brunner, Dianne P., (George), Admn. Asst., N.C. Crop Impr. Assoc. 3709 Hillsborough, Box 8604; 3725 Brinkley Dr., 27604	2851	872-9626
Bryan, Barbara C., Clk., Admis. 107 Peele, Box 7103; 3609 Greenlawn Dr., 27609	2433	876-4443
Bryan, Dr. Carl E., Prof. Emer., Chem. 2631 St. Mary's St., 27609		787-0694
Bryan, Charles W., (Carol), Acct., Budg. Off. 206 Holladay, Box 7206; 1005 Urban Ave., Durham 27701	2175	682-8677
Bryan, Miki, (Donald), Data Entry Oper., Admis. 112 Peele, Box 7103; 1142 Villa-Green Ct., 27612	2434	846-1760
Bryan, Dr. Robert S., (Geraldine), Prof., Phil. & Dept. Head, Phil. & Rel. 100 Winston, Box 8103; 2301 Tyson St., 27612	2477	787-8494
Bryan, Robert S., Jr., (Kim), Asst. Dir., Stu. Dev. 214 Harris, Box 7314; 513 Princeton St., 27609	2441	787-7203
Bryan, Thomas E., Res. Tech., Poul. Sci. Univ. Res. Farm 2, Box 7608; 1421 Creech Rd., Garner 27529	755-4185	834-8104
Bryan, William S., Res. Asst. & Teach. Tech., Wood & Paper Sci. Hodges Lab, Box 8005; 3913 Lexington Dr., 27606	2881	828-5079
Bryant, Adele S., (Bill), Admn. Sec., Text. 120 Nelson, Box 8301; 1009 Pebblebrook Dr., 27609	3780	876-3887
Bryant, Arthur, Hskp. Asst., Phys. Plant Park Shops, Box 7219; P.O. Box 743, Spring Hope 27882	3323	478-5135
Bryant, Dr. Charles D., (Virginia), Assoc. Prof. Emer., Occup. Educ. 602 Poe, Box 7801; P.O. Box 513, Stedman 28391	2234	484-4245
Bryant, Charlie, (Helen), Exec. Sec., Wolfpack Club College Inn, Box 8602; 1001 DeBoy St., 27606	2112	851-5898
Bryant, Cindy H., Admn. Asst., Food Sci. 100 Schaub, Box 7624; 1408 A-1 Stovall Dr., 27606	2951	834-7442
Bryant, Dr. Michael D., (Eugenia), Assoc. Prof., Mech. & Aero. Engr. 4158 Broughton, Box 7910; 3451 Redbud Ln., 27607	3241	781-2447
Bryant, William J., (Patricia), Lab. Ani. Tech., Lab. Ani. Resou., SVM 4700 Hillsborough St., Box 8401; 28 Spring Hill Pk., Chapel Hill 27514	829-4201	967-9361
Bryant, Vanessa, Food Serv. Asst., Univ. Dining Dining Hall; 209 Ramblewood Dr., 27609	3963	
Bryson, Wanda S., Clk.-Typ., Contr. & Grants Leazar, Lower Level, Box 7214; 3118A Lake Wheeler Rd., 27603	2153	839-2365
Buchanan, Christine N., Admn. Sec., Admn. Comp. Serv. B 21 Hillsborough Bldg., Box 7209; 2705 Anderson Dr., 27608	2794	781-2427
Buchanan, Dr. David R., (Sara), Prof., Text. Engr. & Sci. B-9 Nelson, Box 8301; 11313 Coachmans Way, 27614	3481	847-1991
Buchanan, James S., Prof. Emer., Ani. Sci. Polk, Box 7621; 2622 Grant Ave., 27608	2761	787-5187
Buchler, Warren A., Acct., Budg. Off. 206 Holladay, Box 7206; 3036 Rothgeb Dr., 27609	2175	781-1263
Buck, Rose J., (Albert), Clk. Steno., Ent. 3709 Hillsborough St., Box 8604; Rt. 1, Box 234, Wendell 27591	3391	266-5645
Bucklew, Cherie A., Clk. Recept., Comp. Sci. 122 Daniels, Box 8206; 708-D Devereux St., 27605	2858	832-2740
Buckley, K. Isabelle, Assoc. Ext. Prof. Emer., Home Ec. Ext. 2409 Stafford Ave., 27607		834-8121

Name, Title, Department and Address	Office Phone	Resid. Phone
Buckmaster, H. Leo, (Elaine), Dir., Admn. Comp. Serv.	2794	851-1108
B-21 Hillsborough Bldg., Box 7209; 5021 Newcastle Rd., 27606		
Buffaloe, Annie Bell, Supv. Mail Clk., Libr.	2170	833-2657
G210 Library, Box 7111; 1510 Raleigh Blvd., 27610		
Buffaloe, Arthur, Truck Driver, Univ. Dining	2021	832-0954
B-123 Univ. Stu. Ctr., Box 7307; 1510 Raleigh Blvd., 27610		
Buffaloe, David E., (Barbara), Res. Mech., Bio. & Agri'l. Engr.	3101	876-4777
130 Weaver, Box 7625; 2727 New Hope Rd., 27604		
Bull, Joseph O., (Kathy Cleveland), Univ. Dev. Off., Dev.	2034	737-6538
20 Enterprise St., Box 7502; Box 7315—208 Harris, 27695-7315		
Bullerwell, Arthur C., (Martha), Instr., Text. Engr. & Sci.	3481	847-8329
307 Nelson, Box 8301; 3116 Paxton Pl., 27612		
Bullock, Jimmie L., Prod. Supv., UNC Ctr. for Pub. TV	2853	779-5453
TV Ctr., Box 8601; 213 Bainbridge Cir., 27529		
Bullock, Mable M., (Stanley), Clk.-Recept., Acid Depos. Prog., For.	3520	839-0685
1509 Varsity Dr., Box 7632; 1730 B Gorman St., 27606		
Bullock, Dr. Roberts C., Prof. Emer., Math.		787-6797
1415 Dixie Tr., 27607		
Bumgardner, Dr. Carl L., (Ann), Prof., Chem.	3199	787-3603
525-A Dabney, Box 8204; 4113 Glen Laurel Dr., 27612		
Bunce, Phyllis G., (C. L.), Sec., Civil Engr.	2331	469-2349
208 Mann, Box 7908; 1416 Debra Dr., Cary 27511		
Bunch, Harold A., (Cusie), Capt., USN, Prof., Naval Sci.	2907, 2908	929-1496
104, 304 Reynolds Coliseum, Box 7310; 1202 LeClair St., Chapel Hill 27514		
Bunch, Leon, Disp., Motor Pool, Phys. Plant	2179	
Sullivan Dr., Box 7219		
Bunch, Dr. Susan E., Asst. Prof., Comp. Ani. & Sp. Species Med., SVM	829-4271	781-3725
4700 Hillsborough St., Box 8401; 5305 Cedarwood Dr., 27609		
Bundy, James H., Univ. Registrar, Reg. & Rec.	2576, 2577	787-2108
100 Harris, Box 7313; 4937 Carteret Dr., 27612		
Bundy, Margaret C., Res. & Teach. Tech., Chem.	2998	876-1792
12 Dabney, Box 8204; 5809 Dogwood Dr., 27604		
Bunn, Billy R., (Sue), Supv., Spec. Acct. Serv.	2148	266-1809
204 Admn. Serv. Ctr., Box 7205; Rt. 12, 27610		
Bunn, Carolyn C., (Hal E.), Sec., Crop Sci.	2647	832-9312
2207 Williams, Box 7620; 405 Robin Hood Dr., 27604		
Bunn, Donna J., (Riley), Data Proc. Asst., Ext. Pers.	2814	821-3945
112 Ricks, Box 7602; 719 Kimbrough St., 27608		
Buol, Gregory S., Stat. Res. Asst., Crop Sci.	2246	828-8097
2404 Williams, Box 7620; 1408 Creech Rd., Garner 27529		
Buol, Dr. Stanley W., Prof., Soil Sci.	2388	828-8097
3218 Williams, Box 7619; 1408 Creech Rd., Garner 27529		
Burak, Kathryn A., Lect., Engl.	3863	859-0758
205 Tompkins, Box 8105; 3040 Walnut Creek Pkwy., 27606		
Burch, Charlie E., (Mary), Const. Estimator, Phys. Plant	3323	639-2995
Park Shops, Box 7219; Rt. 2, Box 313, Angier 27501		
Burch, Joyce F., (James H.), Clk., Parking Serv.	2120	781-7171
Admn. Serv. Ctr., Box 7222; 5933 Crepe Myrtle Ct., 27609		
Burchfield, Betty A., Acct. Tech., Dairy Rec. Proc. Ctr.	7828	782-2330
Leazar, Box 7623; 2938 Claremont Rd., 27608		
Burden, Emily, Hskp. Asst., Phys. Plant	3323	
Park Shops, Box 7219; 504 Rock Quarry Rd., 27610		
Burdick, Jennifer F., Scheduling Off., Phys. Plant	3448	469-2772
128 Morris, Box 7219; 803 Kensington Dr., Cary 27511		
Burger, Charles H., Jr., Vis. Asst. Prof., Lands. Arch.	3051, 3052	
A-304 Brooks, Box 7701		
Burgess, Brenda K., Clk.-Typ., Chem.	2546	
108 Dabney, Box 8204		
Burgess, Harriet C., Pers. Asst., Admn. Serv., Engr.	2310	782-0612
101 Page, Box 7901; 2803 Oberlin Rd., 27608		
Burgess, Susan B., Payr. Clk., SVM	829-4200	
4700 Hillsborough St., Box 8401		

Name, Title, Department and Address	Office Phone	Resid. Phone
Burkart, Sheila, Clk., Agri'l. Comm. ....2791 17 Ricks, Box 7603; 119 N. Lord Ashley Rd., 27610		
Burke, Cynthia W., (Keith), Sec., Gen. ....2285 3627 Gardner, Box 7614; 1414 Foxwood Dr., Garner 27529		772-8981
Burke, Nancy R., Tech. Typ., Math. ....2382 250 Harrelson, Box 8205; Box 327, Four Oaks 27524		
Burkey, Dr. Kent O., Asst. Prof., Crop Sci. & Bot. ....3905 3127 Ligon St., Box 7631; 1401 Roy Averett Dr., 27603		859-0718
Burnett, Catherine L., Hskp. Asst., Phys. Plant ....3323 Park Shops, Box 7219		
Burnette, Dr. David R., (Carol), Dist. Chm., Agri'l. Ext. ....2690 301 Ricks, Box 7604; P.O. Box 7317, Asheville 28807		704-258-6140
25 Griffing Cir., Asheville 28804		704-254-2211
Burnette, Julia C., (Raymond), Sec., Campus Plan. & Const. ....2121 219 Oberlin Rd., Box 7216; 2431 Melvid Ct., 27610		828-3627
Burnette, W. Haywood, (Betty), Instr. Mkr., Physics ....2508 7 Cox, Box 8202; Rt. 5, Box 43, Apex 27502		362-6672
Burnham, Dr. Kenneth P., Assoc. Prof. (USDA), Stat. ....2584 509-F Cox, Box 8203; 1111 Collington, Cary 27511		469-8872
Burniston, Dr. Ernest E., (Isabella), Prof. & Head, Math. ....3798 360-A Harrelson, Box 8205; 4301 Union St., 27609		787-8570
Burno, Peggy D., (Luther), Supv., Univ. Dining ....2021 Univ. Stu. Ctr., Box 7307; 622 Georgetown Rd., 27608		833-9951
Burns, Dr. Joseph C., Prof., Crop Sci., USDA ....2657 1119 Williams, Box 7620; 1213 Imperial Rd., Cary 27511		467-6394
Burns, Joyce A., Res. Analyst, Crop Sci. ....3267 4416 Williams, Box 7620; 3527 Horton St., 27607		781-4840
Burns, Robert P., (Norma), Assoc. Dean Sch. of Design & Head, Arch. ....2204, 2205, 2206 222 Brooks, Box 7701; 750-306 Washington St., 27605		821-7578
Burrows, Steven M., Stable Iso. Lab. Mgr., Mar., Earth & Atmos. Sci. ....7143 140 Withers, Box 8208		
Burt, Levi, Storeroom Mgr., Phys. Educ. ....3508 1217B Carmichael, Box 8111; 408 B. Clover Ln., 27604		832-5939
Burt, Dr. Millard P., (Anne), Prof. Emer., Adult & Comm. Coll. Educ. ....3890 725 Poe, Box 7801; 3329 Lake Boone Tr., 27607		781-6596
Burton, Brenda H., (Philip), Analyst Programmer, Admn. Comp. Serv. ....3640 1212 Blue Ridge Rd., Box 7227; 3000-158 Stony Brook Dr., 27604		876-0794
Burton, Eva B., Agri'l. Res. Asst., Poul. Sci. ....3921 URF 6, Box 7608; 509 Florence St., 27603		832-4911
Burton, Dr. Joe W., (Linda), Assoc. Prof., Crop. Sci., USDA-ARS ....3905 3127 Ligon St., Plant Sci. Res., Box 7631; 633 S. Lakeside Dr., 27606		851-5596
Burton, Pauline, Clk., Phys. Plant ....3080 Armory Shops, Box 7219; 203 Harper St., Garner 27529		
Burton, Dr. Ralph A., Prof., Mech. & Aero. Engr. ....872-3923 4940 N. Blvd., Box 7910; 1825 Ridge Rd., 27607		787-1592
Butcher, Dr. Kenneth R., (Sue), Prof., Dir., Dairy Rec. Proc. Ctr. ....2632 Leazar, Box 7623; 1721 Tropical Dr., 27607		851-3542
Butcher, Sue S., (Ken), Clk.-Typ., Zool. ....3293 1627 Gardner, Box 7617; 1721 Tropical Dr., 27607		851-3542
Butler, Albert R., (Sidney), Agri'l. Res. Tech., Crop Sci. ....3216 4320 Williams, Box 7620; 3905 Wester Rd., 27604		872-7973
Butler, E. Maxine, Admn. Asst., Crop Sci. ....2647 2125-A Williams, Box 7620; 2963 Wycliff Rd., 27607		782-4745
Butler, James K., (Lillian), Sr. Ext. Spec., Ani. Sci. ....2761 119 Polk, Box 7621; 3332 Ocotea St., 27607		787-5503
Butler, Reginald D., Instr., ....2483 104 Harrelson, Box 8108; 1020 Peace T6, 27606		834-1134
Butler, Ronald C., (Billie M.), Assoc. Vice Chan., Stu. Aff. ....2962 205 Peele, Box 7317; 7901 Rotterdam Ct., 27606		362-5178
Butts, Brenda F., Sec., Bio. & Agri'l. Engr. ....2675 203 Weaver, Box 7625; 1299-H Schaub Dr., 27606		851-9415

Name, Title, Department and Address	Office Phone	Resid. Phone
Byers, Dr. Ralph, Asst. Prof., Math.	3265	859-1373
329 Harrelson, Box 8205; 141-A Jones Franklin Rd., 27606		
Bynum, Frank B., Jr., (Elmarie), Supt., Phys. Plant	3408	828-4315
Sullivan Dr., Box 7219; 3101 Little John Rd., 27610		
Byrd, Addie B., Res. Tech., For.	3168	832-5487
1007 Biltmore, Box 8002; 1824 Trailwood Dr., 27606		
Byrd, Amy L., Recept., Design	2208	833-3883
200 Brooks, Box 7701; 817 Bryan St., 27605		
Byrd, Bobby C., (Bertie), HVAC Supv., Phys Plant	3080	722-0286
Armory, Box 7219; 918 Sunny Lane, 27603		
Byrd, Gloria T., (Tyrone), Sec., Dean's Off., Educ.	2231	848-8919
208 Poe, Box 7801; 7700 Featherstone Dr., 27609		
Byrd, James M., Stock Clk., Univ. Dining	2021	
Univ. Stu. Ctr., Box 7307; 1102 Gregg St., 27601		
Byrd, Jo Ann J., (Billy Ray), Clk., Ec. & Bus.	3273	365-5584
202 Patterson, Box 8109; 616 Raymond Dr., Wendell 27591		
Byrd, Kathryn H., (Jimmy), Admn. Sec., SVM	829-4211	787-1096
4700 Hillsborough St., Box 8401; 4916 Sweetbriar Dr., 27609		
Byrd, Levander, Laborer, Phys. Plant	3408	362-8702
Sullivan Dr., Box 7219; P.O. Box 470, Apex 27502		
Byrd, Mary G., (Wade), Acct. Clk., Math.	3796	552-9213
357 Harrelson, Box 8205; 8428 Settlers Hill Rd., Willow Spring 27592		
Byrd, Nancy C., (Ray), Sec., Alum. Rel.	3375	772-2601
Alumni, Box 7503; 309 Trail of Merlin, Garner 27529		
Byrd, Paul W., (Elouise), Maint. Mech., Phys. Plant	2184	787-6600
Heating Plant, Box 7219; 3609 Eden Croft Dr., 27612		
Bryd, Rebecca L., Hskp. Asst., Phys. Plant	3323	553-6096
Park Shops, Box 7219; Clayton Manor G-4, Clayton 27520		
Byrd, Sharon D., (Larry), Sec., Phys. Plant	2180	963-3471
209 Morris, Box 7219; Rt. 2, Box 88A1, Four Oaks 27524		
Byrd, Thomas M., (Janet), In Charge, Press, Radio & TV, Agri'l. Comm.	3173	467-9848
314 Ricks, Box 7603; 903 Washington St., Cary 27511		
Byrne, Stephen V., Stat. Res. Asst., Plant Path.	2735	269-4450
1515 Gardner, Box 7616; Rt. 4, Box 220, Zebulon 27597		

C

Cable, Beverly W., (Phil), Pers. Tech., Prov. Off.	3919,2193	467-6793
201-A Holladay, Box 7101; 313 White Oak Dr., Cary 27511		
Cain, Robert T., (Susan), Asst. Football Coach, Athl.	2613	859-1991
Weisiger-Brown Athl. Fac., Box 8502; 2210 Cary-Macedonia Rd., 27606		
Cain, Ronda H., (Anthony), Libr. Clk., Media Ctr.	2977	
2305 Library, Box 7111; 1319 Beverly Dr., 27610		
Cairns, Robert S., III, Asst. Dir. Electronic Media, Info. Serv.	3470	782-3949
219 Oberlin Rd., Box 7504; Box 193, Rt. 3, 27612		
Caldwell Ann C., Admn. Off., Agri. & Life Sci.	2666	787-8341
104 Patterson, Box 7601; 820 Lake Boone Tr., 27607		
Caldwell, Dr. Billy E., (Wilma), Prof. & Head, Crop Sci.	2647	467-0658
2203 Williams, Box 7620; 145 Lee Cir., Cary 27511		
Caldwell, Jane M., (Dan Leonard), Ext. Spec., Poul. Sci. Ext.	2621	828-3884
215 Scott, Box 7608; 154 Maywood Ave., 27603		
Caldwell, Dr. John T., (Carol), Chan. Emer. & Prof., Pol. Sci.	3753	782-5213
732-A Poe, Box 7801; 3070 Granville Dr., 27609		
Caldwell, Robert A., Asst. Football Coach, Athl.	2646	
Weisiger-Brown Athl. Fac., Box 8502		
Caldwell, Ronita J., (Percy), Empl. Spec., Human Resou.	2135	
Admn. Serv. Ctr., Box 7210; 4917 Tyne Dr., Durham 27712		
Callahan, Kenneth V., (Doris), Lab. Mech., Text. Engr. & Sci.	3074	772-6996
222 Nelson, Box 8301; Rt. 3, Box 340, 27603		
Callanan, Dr. Roger A.E., (Nancy), Instructional Coord., Acad. Skills Prog.	7053	933-0193
100 Reynolds Coliseum, Box 7104; 39 Fearington Post, Pittsboro 27312		

Name, Title, Department and Address	Office Phone	Resid. Phone
Callihan, Linda M., Data Entry Oper., Dairy Rec. Proc. Ctr.	2075	
Leazar, Box 7623; 124 Greengate Ct., Cary 27511		
Camberato, Diane M., (James J.), Res. Tech., Plant Path.	3575	848-8774
3908 Inwood Rd., Box 7632; 8217 Creedmoor Rd., 27612		
Cameron, Spurgeon, Asst. Dir., Urb. Aff.	2578	828-7318
259 McKimmon, Box 7401; 214 Avon Dr., 27608		
Camp, Dr. L. Raymond, (Carolyn), Assoc. Prof., Speech-Comm.	2450	467-9824
210 Winston, Box 8104; 1004 Warren Ave., Cary 27511		
Campbell, Billy E., (Bertha), Cabinet Maker, Phys. Plant	3323	934-2636
Park Shops, Box 7219; 101 Cloverdale, Smithfield 27577		
Campbell, Dr. C. Lee, (Karen), Assoc. Prof., Plant Path.	2751	467-8571
3406 Gardner, Box 7616; 604 Blackshoals Dr., Cary 27511		
Campbell, Carlton L., (Phil), Res. Tech., Soil Sci.	3288	851-1162
1218 Williams, Box 7619; 2816 Campbell Rd., 27606		
Campbell, Charles G., Farm Supt., Ani. Sci.	772-6711	779-0847
Rt. 2, Randleigh Farm, Unit 7, Box 7621; Rt. 2, Box 299, 27610		
Campbell, Dr. Dale F., Asst. Prof., Adult & Comm. Coll. Educ.	3591	787-6491
310 Poe, Box 7801; 410 Oak Hollow Ct., 27612		
Campbell, Henry F., (Macy), Agri'l. Res. Tech., Crop Sci.	2642	851-3270
840 Method Rd., Unit 3, Box 7629; 3408 Campbell Rd., 27606		
Campbell, Kenneth S., Prof. Emer., Text. Chem.		787-4659
1720 Nottingham Rd., 27607		
Campbell, Larry E., (Sandra), Asst. Prog. Dir., Univ. St. Ctr.	2451	782-7145
3114 Univ. Stu. Ctr., Box 7306; 4212 Azalea Dr., 27612		
Campbell, Peter V., Res. Tech., Zool.	2024	266-3030
1610 Gardner, Box 7617; Rt. 2, Box 151A, 27610		
Campbell, Phil, (Carlton), Sec., Admis. & Transfers, Engr.	3263	851-1162
115 Page, Box 7901; 2816 Campbell Rd., 27606		
Campbell, Dr. Stephen L., (Gail), Prof., Math.	3300	787-2828
338 Harrelson, Box 8205; 1316 Kintyre Ct., 27612		
Campbell, Theresa B., (Martin), Lab. Tech., Health Serv.	2564	552-4089
Clark Inf., Box 7304; 316 Mill Creek Dr., Fuquay-Varina 27526		
Campbell, Dr. William V., (Dorothy), Prof., Ent.	2833	787-1417
4301 Gardner, Box 7613; 4312 Galax Dr., 27612		
Canada, Dr. John R., (Wanda), Prof., Ind. Engr.	2362	781-4906
323 Riddick, Box 7906; 4513 Bartlette Dr., 27609		
Canady, Anne E., (Jim), Admn. Asst., Res. Admin.	2117	876-8142
103 Holladay, Box 7003; 2104 Langdon Rd., 27604		
Canady, Bubba W., (Melinda Penny), Plumber, Phys. Plant	3080	553-7250, 772-8986
Armory; 3001 Garner Rd., Clayton 27520		
Canady, H. Dwight, (Clara Lee), Mech. Supv., Heavy Equip. & Spec. Events	3479	
18 Riddick Stad., Box 7219		
Canady, Lougenia C., Hskp. Asst., Stu. Aff.	3340	
Univ. Stu. Ctr., Box 7306; 719 S. Person St., 27601		
Candler, John, (Mary), Diving Coach & Asst. Strength Coach, Athl.	2796	851-3935
Reynolds Coliseum, Box 8501; 820 Ravenwood Dr., 27606		
Cannady, Kathy L., Sec., Chem. Engr.	2499, 7121	
24 Riddick, Box 7905		
Cannady-Kea, Paulette C., (Charlie), Sec., Elec. & Comp. Engr.	2336	828-8372
404B Daniels, Box 7911; 2508 Keith Dr., 27610		
Cannella, Doris B., (Butch), Cust. Serv., SSS	2161	781-5328
SSS, Box 7224; 5012 Dantree Pl., 27609		
Cannon, Dr. Ronald E., Res. Assoc., Gen.	2294	481-0950
3632 Gardner, Box 7614; 5332 April Wind Dr., Fuquay-Varina 27526		
Capps, Karen P., (Jim), Clk., Admis.	2433	787-6637
107 Peele, Box 7103; 3958-A Tara Dr., 27609		
Capps, N. Susan, Res. Tech., Crop Sci.	3267	556-4726
4411 Williams, Box 7620; Rt. 2, Box 7, Wake Forest 27587		
Capps, Paul J., Elect., Phys. Plant	3080	552-7375
Armory Shop, Box 7219; 135 Walnut Dr., Garner 27529		
Capps, Wayne, (Pam), Elect., Phys. Plant	3080	897-4441
Armory, Box 7219; Rt. 4, Box 848, Dunn 28334		

Name, Title, Department and Address	Office Phone	Resid. Phone
Capps, Wilbert, Jr., (Barbara), Painter, Phys. Plant Park Shops, Box 7219; 8316 Oakcliff Lane, Angier 27501	3323	639-6897
Carawan, Dr. Roy E., (Debbie), Assoc. Prof., Food Sci. 129-C Schaub, Box 7624; 135 Castlewood Dr., Cary 27511	2956	467-9937
Carbonell, Dr. Ruben G., (Augustina), Prof., Chem. Engr. 223 Riddick, Box 7905; 6105 Godfrey Dr., 27612	2499	787-7356
Carey, Janet B., (John J.), Comp. Oper., Dairy Rec. Proc. Ctr. Leazar, Box 7623; 4221 Redington Dr., 27609	7828	782-5857
Carey, Dr. John B., (Phyllis), Asst. Prof., Poul. Sci. 202 Scott, Box 7608; 1212 Oxford Pl., Cary 27511	2621	467-8368
Carlsen, Polly A., Sec., Plant Path. 2403 Gardner, Box 7616; 204 N. Aiken St., Fuquay-Varina 27526	2721	552-4914
Carlson, Dr. Gerald A., (Barbara), Prof., Ec. & Bus. 308B Hillsborough Bldg., Box 8110; 1306 Mayfair Rd., 27608	2472	782-7549
Carlton, Caroline, (Charles), Design Librn., Design Libr. 209 Brooks, Box 7701; 5813 Hedgemoor Dr., 27612	2207	848-9520
Carlton, Dr. Charles H., (Caroline), Prof., Hist. 114 Harrelson, Box 8108; 5813 Hedgemoor Dr., 27612	2484	848-9520
Carmichael, Angie, Clk.-Typ., Ent. 2301 Gardner, Box 7613; 4111 Garland Ave., 27606	2620	851-0638
Carmichael, Dr. Halbert H., (Anne), Prof., Chem. 840 Dabney, Box 8204; 1001 Marlborough Rd., 27610	2995	832-4128
Caroway, Cedric S., Laborer, Phys. Plant Sullivan Dr., Box 7219; 1352 Branch St., 27601	3408	834-4919
Caroway, Rosa L., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 1352 Branch St., 27601	3323	834-4919
Carpenter, Josefina B., Locksmith, Phys. Plant 11 Park Shops; Box 7219; 540 Drolmond Dr., 27609	3323	846-7320
Carpenter, Karen E., (Scott), Clk.-Typ., Telecomm. Admn. Serv. Ctr. 2nd Floor, Box 7217; 600 Lakeview Dr., 27603	7123	779-1844
Carpenter, Mark S., (Louise), Agri'l. Res. Tech., Soil Sci. 3413 Williams, Box 7619; 7007 Altdorf St. Bahama, 27503	2600	479-0297
Carpenter, Sandy, Sec., Ec. & Bus. 205 Patterson, Box 8109; 1533 Aridith Ct., Cary 27511	3951	467-1917
Carpenter, Shirley J., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 4306 Martha St., 27610	3323	833-3160
Carpenter, Dr. William L., (Matt), Prof. In Charge, Pub., SALS, Emer., Agri'l. Comm. Box 7603; Rt. 4, Box 713-G, Lincolnton 28092	704-922-5325	
Carr, John, (Jill), Vis. Lect., For. Lang. 134 1911 Bldg. Box 8106; 311 S. LaSalle No. 23A, Durham 27705	2475	383-8624
Carraway, Dr. Ernest R., Jr., Lect., Ec. & Bus. 213-C Hillsborough Bldg., Box 8110; 6204 Shanda Dr., 27609	3884	
Carrere, E. Carol, (Tim), Lab. Mgr., Text. Mgmt. & Tech. B-48 Nelson, Box 8301; 105 Cameron Ct., Cary 27511	3469	469-9459
Carrington, Harvey L., Laborer, Phys. Plant Sullivan Dr., Box 7219; 206 New Rand Rd., Garner 27529	3408	
Carroll, Carl L., (Bobbie), Lab. Mgr., Gen. 3515 Gardner, Box 7614; Rt. 2, Box 26-A, Wake Forest 27587	2285	556-1056
Carroll, Carol M., Acct. Tech., Stu. Aff. 101 Holladay, Box 7301; 6507 English Oaks, 27615	2446	848-8615
Carroll, Cary G., (Julia F.), Maint. Mech., Phys. Plant Park Shops, Box 7219; Rt. 2, Box 295, Creedmoor 27522	3323	528-2800
Carroll, Dr. Daniel E., Prof., Food Sci. 116-D Schaub, Box 7624; 300 Trotters Ridge Dr., 217614	2959	847-9784
Carroll, Dr. F. Ivy, Adj. Prof., Text. Chem. P.O. Box 12194, RTI, Res. Tri. Pk. 27709	549-6679	541-6679
Carroll, Lynne R., Res. Tech., Biochem. 137 Polk, Box 7622; 611 West Lane St., Apt. 16, 27603	2581	834-5572
Carroll, Major W., (Teresa), Dairy Plant Oper., Food Sci. 13 Schaub, Box 7624; 1325 Hwy. 70 W., Box 18, Clayton 27520	2760	553-5506
Carroll, Rose C., (Milton), Sec., Athl. Case Athl. Ctr., Box 8501; 1715 St. Patrick Dr., 27603	2560	772-2994

Name, Title, Department and Address	Office Phone	Resid. Phone
Carson, Andre L., Acct., Payr. & Ben.	2151	781-3478
Admn. Ser. Ctr., Box 7215; 2401-F Still Forest, 27607		
Carson, Christopher P., Ext. Microcomputer Consult. Spec., Ext. Comp. Serv.	3727, 3741	834-4534
1110-A Grinnells, Box 7626; 3804 Kelford St., 27606		
Carson, Kim, Data Proc. Coord., Prov. Off.	2193	859-2318
202 Holladay, Box 7101; 5411 Penwood Dr., 27606		
Carson, Lewis A., Analyst Programmer, Admn. Comp. Serv.	3541	832-4537
Leazar, Lower Level, Box 7209; Box 50268, 27650		
Carson, Dr. Robert G., (Elizabeth), Prof. Emer., Ind. Engr.		787-6975
1202 Brooks Ave., 27607		
Carstens, Timothy V., Librn., Monographic Cat.	2603	839-0012
1121 Library, Box 7111; 211 Park Ave. 3, 27605		
Carter, Dr. Calvin H., Jr., (Kelly), Vis. Res. Asst. Prof., Mat. Engr.	2347	828-3682
1 Riddick Annex, Box 7907; 4400 Yates Pond Rd., 27606		
Carter, Catherine C., (Thomas), Res. Asst., Plant Path.	3488	851-7201
2420 Gardner, Box 7616; 1812 Dorton Rd., 27607		
Carter, Emmett, (Madeline), Maint. Mech., Phys. Plant	3323	772-4837
Park Shops, Box 7219; 203-Benson Rd., Garner 27529		
Carter, Dr. G. L., Prof., Adult & Comm. Coll. Educ.	3590	834-1151
310 Poe, Box 7801; 740 E. Smallwood Dr., Apt. 14, 27605		
Carter, Gloria, Food Serv. Asst., Univ. Dining	3963	
Dining Hall, Box 7307		
Carter, J. Wade, (Skippy), Ext. Spec., Text. Ext.	3761	848-0643
B-21 Nelson, Box 8301; 8339 Morgan's Way, 27612		
Carter, Larry A., Agri'l. Res. Tech., Plant Path.	3306	772-5320
3404 Gardner, Box 7616; 607 Lakeview Dr., 27603		
Carter, Madeline S., (Emmett), Snackbar Supv., Univ. Dining	2166	772-4837
Tunnel Inn Snack Bar, SSS; 203 Benson Rd., Garner 27529		
Carter, Marie, Food Serv. Asst., Univ. Dining	3963	
Dining Hall, Box 7307		
Carter, Dr. Michael P., (Jean), Asst. Prof., Engl.	3863	
276 Tompkins, Box 8105		
Carter, Dr. Philip B., (Joan), Assoc. Vice Chan., Res., Res. Admn.	7199	848-2192
1 Holladay, Box 7003; 12916 Barsanlaw Dr., 27612		
Carter, Dr. Thomas A., (Vivian), In Charge, Poul. Sci. Ext.	2621	851-5957
208 Scott, Box 7608; 1449 Princess Anne Dr., 27607		
Carter, Dr. Thomas E., Jr., (Cathy), Res. Geneticist, Crop Sci., USDA	3905	851-7201
3127 Ligon St., Plant Sci. Res., Box 7631; 1812 Dorton Rd., 27607		
Carter, Thomas E., (Mary), Painter, Phys. Plant	3323	553-5883
Park Shops, Box 7219; 424 Canady St., Clayton 27520		
Carter, Dr. William R., (Leilani), Prof. Phil., Phil. & Rel.	3214	787-6947
G104 Winston, Box 8103; 3509 Catalano Dr., 27607		
Caruolo, Dr. Edward V., (Alice), Prof., Ani. Sci.	3319	851-3190
1147 Grinnells, Box 7626; 6412 Brandywine Dr., 27607		
Caruso, Katherine N., Sec., Ec. & Bus.	3273	787-8204
210 Patterson, Box 8109; 4361 Edwards Mill Rd., 27612		
Carver, Laura A., (Mike), Lab. Ani. Tech., SVM	829-4200	851-7712
4700 Hillsborough St., Box 8401; 5103 Lundry Dr., 27606		
Casas, Dr. Ivan A., (Yolanda), Vis. Prof., Microb.	7502	833-2767
4519 Gardner, Box 7615; 921 St. Mary's St., 27605		
Case, Lisa M., Clk.-Typ., Crop Sci.	3666	851-8457
2205 Williams, Box 7620; 3061 A Kings Ct., 27606		
Casey, Joy P., Budg. Clk., SVM	829-4200	755-0618
4700 Hillsborough St., Box 8401; 804 W. Morgan, Apt. E-1-B, 27603		
Cashion, Betty S., (Jim), Sec., Athl.	2114	779-6346
Weisiger-Brown Athl. Fac., Box 8502; 3720 Vesta Dr., 27603		
Cassel, Dr. D. Keith, (Charlotte), Prof., Soil Sci.	2600	851-6508
3410 Williams, Box 7619; 4805 Kaplan Dr., 27606		
Castle, Linda G., Sec., Housing & Resid. Life	2419	
Harris, Box 7315		
Castleberry, Jody D., (Tracy), Typ., For., Acid Depos. Prog.	3311	553-3818
1509 Varsity Dr., Box 7632; 3001 Castleberry Rd., Clayton 27520		

Name, Title, Department and Address	Office Phone	Resid. Phone
Castro, Mary F., (Martin), Vis. Lect., For. Lang.	2475	847-1662
135-A 1911 Bldg., Box 8106; 3141-A Walnut Creek Pkwy., 27606		
Cates, Dr. David M., (Mary), Prof. & Grad. Administrator, Text. Chem.	2551	787-2488
3 Clark, Box 8302; 1807 Manuel St., 27609		
Catignani, Dr. George L., (Joan), Assoc. Prof., Food Sci.	2968	469-0567
218 Schaub, Box 7624; 241 Fairview Dr., Cary 27511		
Caton, Jesse B., Jr., Hskp. Asst., Phys. Plant	3323	772-5739
Park Shops, Box 7219; 1002 Poplar Ave., Garner 27529		
Caudill, Corina D., Vet. Tech., Vet. Teach. Hosp., SVM	829-4200	
4700 Hillsborough St., Box 8401		
Caudle, Neil C., (Janet), Ed., Int'l. Prog., Agri'l. Comm.	3173	732-2483
311 Ricks, Box 7603; Rt. 6, Box 783, Hillsborough 27278		
Causby, Kathy A., (Stan), Sec., Agri'l. Ext. Serv.	2780	847-3106
307 Ricks, Box 7604; 7417 Longstreet Dr., 27609		
Cavarec, Dr. Victor V., (Carolyn), Prof., Mar., Earth & Atmos. Sci.	7836	828-2373
144 Withers, Box 8208; 504 Tilden St., 27605		
Caves, John R., (Kathern), Mgr. Reac. Oper. Trng., Nuc. Engr.	2530	847-1731
2124 Burlington, Box 7909; 7309 Fiesta Way, 27609		
Caves, Thomas C., (Judy), Assoc. Prof., Chem.	3296	821-5402
812 Dabney, Box 8204; 1541 Caswell St., 27608		
Cellini, Pat. (Al), Sec., Design	3051, 3052	266-4879
200 Brooks, Box 7701; 107 Thomas Pl., Knightdale 27545		
Cervantes, Dr. Hector M., Intern, Avian Med., Vet. Teach. Hosp., SVM	829-4200	
4700 Hillsborough St., Box 8401		
Chalmers, Alois L., Admn. Sec., Pol. Sci. & Pub. Admin.	2481	829-0940
216 Link Bldg., Box 8102; 2200 Biltmore Ct., 27610		
Chalmers, Collins E., Sys. Analyst, Admin. Comp. Serv.	3640	787-5387
1212 Blue Ridge Rd., Box 7227; 2605 Wells Ave., 27608		
Chalou, Cynthia F., (Bob), Study Abroad Adv. Study Abroad Off.,	2087	832-3501
105 Alexander, Box 7315; 804 Dixie Trail, 27607		
Chamberlin, Mark A., Res. Tech., Bot.	2225	269-4820
1229 Gardner, Box 7612; Rt. 4, Box 419A, 27597		
Chamblee, Dr. Douglas S., (Edythe), Prof., Crop Sci.	2657	787-0103
1105 Williams, Box 7620; 3359 Hampton Rd., 27607		
Chamblee, Ella L., Pre-Prep Asst., Univ. Dining Dining Hall, Box 7307; P.O. Box 442, 27602	3963	834-2350
Champion, Alicia B., (David), Lect., Engl.	3863	782-5610
202 Tompkins, Box 8105; 5204 Collingswood Dr., 27609		
Champion, Dr. Larry S., (Nancy), Prof., Engl.	3870	787-3072
221-A Tompkins, Box 8105; 5320 Sendero Dr., 27612		
Chance, Carolyn M., (Tibbitt), Clk., McKimmon Ctr.	2277	821-2061
225 McKimmon, Box 7401; 2108 Saturn, 27603		
Chandler, Lloyd D., (Ann), Res. Tech. Min. Res. Lab.	704-251-6155	
180 Coxe Ave., Asheville 28801; 21 Wynne St., Asheville 28801		
Chandler, Mohenee N., (Douglas), Chem. Analyst, Min. Res. Lab.	704-251-6155	
180 Coxe Ave., Asheville 28801; 21 Wynne St., Asheville 28801		
Chandler, Dr. Richard E., (Suzanne), Prof., Math.	3200	851-2153
224 Harrelson, Box 8205; 1225 Lorimer Rd., 27606		
Chandran, Shanthi, (Ram), Res. Tech., Wood & Paper Sci.	2888	851-8071
3116 Robertson Wing, Biltmore, Box 8005; 4362 Hunters Club Dr., 27606		
Chaney, Dr. David W., (Faith), Dean Emer., Text.		787-4728
6000 Sentinel Dr., 27609		
Chang, Bao-Chu, (Conrad), Cat. Librn., Monographic Cat., Libr.	2603	851-6347
1121 Library, Box 7111; 103 Giner Wood Lane, Cary 27511		
Chang, Dr. Hou-min, (Anne), Prof., Wood & Paper Sci.	2888	787-4183
3117 Biltmore, Box 8005; 3410 Rosebud Ln., 27607		
Chang, Dr. Sheih-Song, Vis. Scholar, Poul. Sci.	2621	
214 Scott, Box 7608		
Chang, Stella, Res. Tech., Plant Path.	2735	851-5397
2605 Gardner, Box 7616; 4302 Hunters Club Dr., 27606		
Chao, Dr. Allen C., (Shirley), Assoc. Prof., Civil Engr.	2331	851-3206
208 Mann, Box 7908; 1301 DeBoy St., 27606		

Name, Title, Department and Address	Office Phone	Resid. Phone
Chaplin, Dr. James F., (Mary), Prof. Emer., Crop Sci. Tob. Res. Lab., Rt. 2, Box 16G, Oxford 27565; 207 Holly Dr., Oxford 27565	693-5151	693-8709
Chapman, Leila, Nurse, Health Serv. Clark Inf., Box 7304; 724 Powell Dr., 27606	2564	851-4849
Chappell, Eunice G., (Willard), Pers. Asst., Prov. Off. 202 Holladay, Box 7101; 200 Duchess Downs, Garner 27529	2193, 3919	772-3068
Chappell, Steven L., (Rita), Grnhse. Mgr., Crop Sci. 840 Method Rd., Unit 2; Box 7628; Unit 301, 12000 Falls of Neuse Rd., Wake Forest 27587	2642	556-7114
Charlton, Dr. Harvey J., Asst. Prof., Math. 310 Harrelson, Box 8205; 236 Singleton St., 27606	7140	851-6626
Chasson, Dr. Albert L., Adj. Prof., Ent. Pathology Laboratory, Rex Hospital; 3305 Redbud Ln. 27607	755-3058	787-9199
Chastain, Shanna M., (Pete), Asst. Prof., Phys. Educ. 2016G Carmichael, Box 8111; 1119 Virginia St., Greensboro 27401	2487, 2488	275-5098
Chastain, William D., Lab. Tech., Ani. Sci. 120 Leazar; 4813 Apt. D., Bluebird Ct., 27606	2822	851-5577
Chavis, Charles S., Hskp Asst., Phys. Plant Park Shops, Box 7219; 605 W. Cabarrus St., 27603	3323	828-1164
Chavis, Connie M., Libr. Clk., Circ. Library, Box 7111; 305-L Dacian Rd., 27610	3364, 3365	828-5165
Chavis, Eloise, Hskp. Asst., Phys. Plant Park Shops, Box 7219; 101 Honey Cir., 27529	3323	755-0035
Chavis, Richard, (Ann), Vehicle Oper., Purch. & Stores Central Stores, Box 7225; 234 Camden St., 27601	2211	755-0035
Chavis, Rose B., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 1104 Seabrook Rd., 27610	3323	
Chavis, Sandra, Food Serv. Asst., Univ. Dining Dining Hall, Box 7307	3963	
Checkley, Dr. David M., Vis. Asst. Prof., Mar., Earth & Atmos. Sci. 700 Gorman St., Box 8208; 2712 Kilgore Ave., 27607	7648	755-1007
Cheek, R. E., Lab. Mech., Text. Mgmt. & Tech. 135 Nelson, Box 8301; 1825 Bellwood, 27605	3076	833-0256
Cheek, William A., (Rosa), Asst. Prof., Phys. Educ. 2032 Carmichael, Box 8111; 3912 Beaumont Ct., 27604	2487	872-1939
Chelf, Christine M., Agri'l Res. Asst., Ani. Sci. 240 Polk, Box 7621; 4145 Kaplan Dr., 27606	2766	851-3528
Chen, Dr. Chen-Loung, (Gretel), Sr. Res. Assoc., Wood & Paper Sci. 3120 Biltmore, Box 8005; 2832 Wycliff Rd., 27607	2888	787-5952
Chen, Grace C., (Roy), Res. Tech., Biochem. 340 Polk, Box 7622; 10004 Whitestone Rd., 27609	2581	848-4441
Chen, Dr. Henry Y.R., (Jennie), Ext. Spec., Bio. & Agri'l. Engr. Ext. Comp., Serv., Box 7626; 604 Powell Dr., 27606	3727, 3741	851-4957
Cheney, Gerry L., (John), Budg. Clk., Ent. 2311 Gardner, Box 7613; 1211 Roundtree Ct., Cary 27511	2733	469-1898
Chern, Dr. Rey T., (Wendy), Asst. Prof., Chem. Engr. 206 Riddick, Box 7905; 716 Merwin Rd., 27606	2328	851-6581
Chernega, Hattie E., (Frank), Clk.-Typ., Acad. Aff.-SALS 115 Patterson, Box 7601; 4128 Yadkin Dr., 27609	2615	787-1900
Cherry, Patsy J., (Donald), Sec., Adult & Comm. Coll. Educ. 113 Ricks, Box 7607; 5020 Newcastle Rd., 27606	2819	851-4757
Chescheir, George M., (Nancy), Res. Asst., Bio. & Agri'l. Engr. 277 Weaver, Box 7625; 23 Copper Hill Ct., Durham 27713	3121	489-6319
Cheshire, Heather M., Res. Asst. & Teach Tech., For. 1002 Biltmore, Box 8002; 3614 Bowling Dr., 27606	2891	851-7905
Chesney, Dr. Clyde E., (Anita), Dist. Prog. Ldr., Agri'l. Ext. Serv. 300 Ricks, Box 7602; 311 Parrish St., 27610	2380	821-7196
Chester, Verna E., (Charles), Data Entry Oper., Dairy Rec. Proc. Ctr. 123 Leazar, Box 7623; 3845 Gelder Dr., 27603	2075	779-5926
Chou, Yoshiko K., Res. Tech., Wood & Paper Sci. 3116 Biltmore, Box 8005; 3112 Merrienne Dr., 27607	2888	781-9073

Name, Title, Department and Address	Office Phone	Resid. Phone
Chevalier, Jean P., (Amy), Tech. Dir., Stewart Thea. Stewart Thea., Box 7306	3927	469-0873
Childers, Faye L., (Joe), Comp. Prog., Stat. 509-C Cox, Box 8203; 925 Barringer Dr., 27606	2584	851-2541
Chilton, Dr. Scott W., (Mary-Dell), Vis. Prof., Bot. 3110, 3108 Gardner, Box 7612; 10513 Winding Wood Tr., 27612	3792, 3403	
Chilton, Susan E., Telecommunications Off., Public Safety Field House, Box 7220	3206	
Chisnell, Dr. John R., (Margo Daub), Res. Assoc., Microb. 4627 Gardner, Box 7615; 1208 Chaney Rd., 27606	3905	851-7408
Chiswell, Pauline W., Nurse, Health Serv. Clark Inf., Box 7304; 1302 Kingston Ridge Dr., Cary 27511	2564	467-1401
Chitsaz, Sirus, (Kaye), Dir., Ctr. for Comm. & Signal Proc. 320-B Daniels, Box 7914; 8632 Windjammer Dr., 27609	3015	847-3849
Chong, Kellie H., Libr. Clk., Monographic Cat. Library, Box 7111; 2700-2 Bedford Ave., 27607	2603	834-0763
Chou, Dr. Wushow, (Lena), Dir., Comp. Stud. Grad. Prog.; Prof., Comp. Sci. & Elec. & Comp. Engr. 318 Daniels, Box 8207; 1213 Willowbrook Dr., Cary 27511	2654	469-2570
Christensen, Janice R., Sr., News Ed., Agri'l. Comm. 317 Ricks, Box 7603; 118 Woodburn Rd., 27605	3173	
Christensen, Dr. Vern L., (RaNae), Assoc. Prof., Poul. Sci. 101-B Scott, Box 7608; 7415 Post Oak Dr., 27609	2623	847-8739
Christian, Dr. Erich, (Edith), Adj. Assoc. Prof., Elec. & Comp. Engr. 232 Daniels, Box 7911; 5704 Edgedale Dr., 27612	2336	848-1214
Christian, John A., (Mary), Prof. Emer., Food Sci. Box 7624; 310 Meredith St., 27606		851-3423
Christians, Vi M., Sec., Crop Sci. 1207 Williams, Box 7620; 2250 Charles Dr. 34-H, 27612	2657	781-0258
Christie, Rhonda A., (Craig), Sec., Home Ec., Agri'l. Ext. Serv. 103 Ricks, Box 7605; 5149 Jefferies Rd., 27606	2782	851-2356
Chu, Dr. Moody T., (Joyce), Asst. Prof., Math. 328 Harrelson, Box 8205; 104 Goldwood Ct., Cary 27511	3265	467-4421
Chung, Dr. Kwong T., (Sylvia S. W.), Prof., Physics 216 Bureau of Mines, Box 8202; 3000 Charwood Pl., 27612	7074	787-2135
Chung, Dr. Lung O., (Lila), Assoc. Prof., Math. 355 Harrelson, Box 8205; 1133 Manchester Dr., Cary 27511	7174	467-7140
Ciardi, Nancy P., Clk.-Typ., Career Plan. & Place. 28 Dabney, Box 7303; Rt. 4, Box 318-H, Zebulon 27597	2396	556-1474
Cigler, Dr. Beverly A., (J. Kent Crawford), Assoc. Prof., Pol. Sci. & Pub. Admin. 228 Link Bldg., Box 8102; 6321 Lakeway Dr., 27612	2481	847-7773
Civanlar, Dr. Mehmet R., (Seyhan), Res. Scientist, Ctr. Comm. Signal Proc. 300 Daniels, Box 7914; 3021E Walnut Creek Pkwy., 27606	2336	859-1788
Civanlar, Dr. Seyhan C., (Mehmet R.), Asst. Prof., Elec. & Comp. Engr. Daniels, Box 7911; 3021E Walnut Creek Pkwy., 27606	2336	859-1788
Clabough, Dr. Debra L., Resid., Lg. Ani. Int. Med., SVM 4700 Hillsborough St., Box 8401	829-4200	
Clapp, Dr. Anne C., (Allen), Asst. Prof., Text. Mgmt. & Tech. B-12 Nelson, Box 8301; 3206 Queens Rd., 27612	3469	787-9852
Clapp, John O., Energy Conservation Sys. Engr., Phys. Plant 10-D Riddick Stad., Box 7219; 801 Valerie Dr., 27606	2184	859-0787
Clapp, Dr. Timothy G., (Sharon), Asst. Prof., Text. Engr. & Sci. 201 Nelson, Box 8301; Rt. 1, Box 107, New Hill 27562	3485	362-8066
Clare, Dr. Debra A., (James), Res. Asst., Ani. Sci. 1150 Grinnells, Box 7626; 105 Honeysuckle Ln., Cary 27511	2019	467-6720
Clark, Artelia S., (Willie), Clk.-Typ., Acad. Skills Prog. 100 Reynolds Coliseum, Box 7104; 303 S. Pettigrew St., 27610	7053	829-8042
Clark, Carol D., (James B.), Libr. Tech. Asst., Libr. 3108C Library, Box 7111; 4400 Irving Ct., 27609	3188	876-1393
Clark, Cheryl A., (Chuck), Sec., Trop. Soils 4234 Williams, Box 7113; 504 Angier Rd., Fuquay-Varina 27526	3922	552-9377

Name, Title, Department and Address	Office Phone	Resid. Phone
Clark, Connie H., Sec., Engr., Res. Prog. 224 Page, Box 7903; 2405-D Landmark Dr., 27607	2345	787-5331
Clark, Don J., Mail Clk., Libr. G-210 Library, Box 7111; P.O. Box 5491, 27650	2170	782-4305
Clark, Donna, Lect., Phys. Educ. 2025 Carmichael, Box 8111; 2024 Gorman St., 27606	2487, 2488	859-2747
Clark, Dr. Edward D., Assoc. Prof., Engl. 216 Tompkins, Box 8105; 5229 Cedarwood Dr., 27609	3863	781-2606
Clark, Edward L., (June), Furn. Spec., Furn. Mfg. & Mgmt. 343 Riddick, Box 7906; 601 Brooks Ave., 27607	3335	832-3094
Clark, Henry K., Carpenter, Phys. Plant Park Shops, Box 7219	3323	
Clark, Dr. James W., Co.-Dir., Hum. Ext., & Assoc. Prof., Engl. M-4 Link, 264 Tompkins, Box 8101, 8105; 809 Gardner St., 27607	3451, 3870	834-6983
Clark, Kenneth R., (Janis), Print Unit Supv., Printing Shop Cont. Educ. 131 McKimmon, Box 7401; 4221 Kilcullen Dr., 27604	3692	
Clark, Dr. Kenneth D., Vis. Asst. Prof., Comp. Sci. 122 Daniels, Box 8206; 100 W. Park Dr., 27605	2858	834-9097
Clark, Dr. Lawrence M., (Irene R.), Assoc. Prov. & Affirm. Act. Off./Compliance Off. for Title IX; Prof., Math. & Sci. Educ. 201 Holladay, Box 7101; 6700 Jean Dr., 27612	3148	848-0975
Clark, Leigh G., Libr. Clk., Serials/Bind., Libr. 116 Library, Box 7111; 724 St. George Rd., 27610	2842	
Clark, Matthew W., (Crystal), Res. Tech., Poul. Sci. Univ. Res. Unit 2, Box 7608; 1622 Pinna Ct., 27606	856-4185	851-3751
Clark, Dr. Robert L., (Mary Kathryn), Prof., Ec. & Bus. 219-I Hillsborough Bldg., Box 8110; 815 Summerwinds Dr., Cary 27511	3886	851-4260
Clark, Roger H., (Judith), Prof., Arch. 310F Brooks, Box 7701; 301 Hillcrest Rd., 27605	3051	755-1958
Clark, Dr. Walter F., Coastal Law Spec., UNC Sea Grant 105 1911 Bldg., Box 8605; 415 Englewood Ave., Durham 27701	2454	688-9451
Clark, Willie W., (Artelia), Laborer, Phys. Plant Recla. Ctr., Box 7219; 303 S. Pettigrew St., 27610	3800	829-8042
Clarkson, Dr. John M., (Margaret), Prof. Emer., Math. Presbyterian Home, Clinton, S.C. 29325		803-833-4342
Clary, Dr. Joseph R., (Katie), Head, Occup. Educ. 502-L Poe, Box 7801; 2812 Glen Burnie Dr., 27607	2234	787-8407
Clawson, Dr. Albert J., (Wanda), Prof., Ani. Sci. 319-C Polk, Box 7621; Rt. 1. New Hill 27562	2773	362-6949
Clay, John S., (Betsy Ross), Ext. Spec., Prog. Dev., Diary Rec. Proc. Ctr. Leazar, Box 7623; 603 Elm St., 27604	2632	833-8374
Clayton, Dr. Carlyle N., (Adelaide), Prof. Emer., Plant Path. 2419 Gardner, Box 7616; 2607 Van Dyke Ave., 27607	2711	832-1363
Clayton, Joyce H., Sec., Gen. 513 Gardner, Box 7614	2292	
Clayton, Dr. Maurice H., (Sophie H.), Prof. Emer., Mech. & Aero. Engr. 1307 Brooks Ave., 27607		787-5225
Clegg, Alvis B., (Imogene), Elect. Tech., Comp. Ctr. 129 Hillsborough Bldg., Box 7109; 1305 Pitkin Ct., 27606	2517	851-2366
Clegg, Russell L., Hskp. Asst. Phys. Plant Park Shops, Box 7219; 808 W. Waddell St., 27576	3323	
Clemons, Van C., Hskp. Supv., Phys. Plant Park Shops, Box 7219; P.O. Box 474, Spring Hope 27882	3323	478-3946
Cleveland Bull, Kathy J., (Joe Bull), Dir., Metcalf Living Learning Prog. Housing & Resid. Life 208 Harris, Box 7315; 208 Harris, 27695-7315	3902	737-6538
Clifford, Dr. William B., (Yevonne S. Brannon), Prof., Soc. & Anth. 336 1911 Bldg., Box 8107; 1400 Lorimer Rd., 27606	2702	851-2805
Clifton, Eddie, (Rogina), Maint. Mech., Phys. Plant Armory, Box 7219; 302 Damon St., Clayton 27520	3080	553-5267
Clifton, Frank J., Bind. Equip. Oper., Univ. Graphics Sullivan Dr., Box 7226; 2009 Atkins Dr., 27610	2131	831-9341

Name, Title, Department and Address	Office Phone	Resid. Phone
Cline, William O., (Angie), Agri'l. Res. Tech., Plant Path. 3416 Gardner, Box 7616; Rt. 1, Box 730, Knightdale 27545	2751	266-1508
Cloer, Hal T., (Anne W.), Elect., Phys. Plant Armory Shop, Box 7219; 7625 Panther Lake Rd., Willow Springs 27592	3080	552-6796
Coates, Gary Y., Asst. Dir., Gen. Serv., Phys. Plant 103 Morris, Box 7219	2181	
Coats, Fran M., (Bill), Admn. Sec., Dean's Off., Engr. 102 Page, Box 7901; 2417 Trawick Rd., 27604	2311	872-1393
Coats, Kenneth M., Welder, Phys. Plant Armory Shops, Box 7219; 4524 Barber Mill Rd., Clayton 27520	3080	934-3818
Coats, Leigh A., Clk., Univ. Cash. & Stu. Accts. 2 Peele, Box 7213; R 2 B 211-AB, Fuquay-Varina 27526	2986	
Cobb, Dr. Grover C., Jr., (Lequita), Assoc. Prof., Physics 405 Cox, Box 8202; 6120 Winthrop Dr., 27612	2515	787-5900
Cobb, Laura F., (Durwood), Clk.-Typ., Math. 255 Harrelson, Box 8205; Rt. 3, Box 159, Wendell 27591	2382, 2383	365-7053
Coble, Dr. Harold D., Prof., (Carol), Crop Sci. 4402C Williams, Box 7620; 202 Frostwood Dr., Cary 27511	2511	851-1775
Cochran, Dr. Fred D., (Dixie), Prof. Emer., Hort. Sci. 2620 Churchill Rd., 27608		787-5640
Cochran, Nancy D., (David), Sec., Zool. 1627-C Gardner, Box 7617; 1312 Prat Ct., 27606	3293	851-5162
Cockerham, Dr. C. Clark, (Joyce), WNR Prof., Stat. & Gen. 608-E Cox, Box 8203; 2110 Coley Forest Pl., 27607	2534	787-4844
Cockshutt, Paul R., Jr., Lect., Engl. 105 Tompkins, Box 8105; 1076 Nichols Dr., 27605	3854	
Coe, Dr. Charles K., (Martha), Asst. Prof., Pol. Sci. & Pub. Admin. 227 Link Bldg., Box 8102; 621 W. Aycock St., 27608	2481	832-7237
Coe, Martha E., (Charles), Master of Pub. Aff. Prog. Coord., Pol. Sci. & Pub. Admn. 222 Link, Box 8102; 621 W. Aycock St., 27608	2481	832-7237
Cofer, Dr. Eloise S., Prof. Emer., Food Sci. & Agri'l. Ext. Serv. Box 7624; 3203 Ruffin St., 27607		828-7924
Coffey, Elizabeth, (Terry), Info Spec., Text. 204 Nelson, Box 8301; 104 Smallwood Ct., Cary 27511	3761	481-1253
Coffey, Dr. M. Terry, (Elizabeth), Asst. Prof., Ani. Sci. 324 Polk, Box 7621; 104 Smallwood Ct., Cary 27511	2773	481-1253
Cofresi, Dr. Lina L., Asst. Dept. Head Assoc. Prof., For. Lang. 126 1911 Bldg., Box 8106; 2208 Hope St., 27607	2475	833-9086
Coggins, Dr. Leroy, (Betty), Prof. & Head, Micro., Path. & Parasit., SVM 4700 Hillsborough St., Box 8401; 309 Kelso Pl., Cary 27511	829-4250	467-7602
Cohen, Dr. Jo-Ann D., (Daniel Teague), Assoc. Prof., Math. 309 Harrelson, Box 8205; 1003 Suterland Rd., Cary 27511	7657	362-9358
Cohn, Dr. Leah A., Intern, Sm. Ani., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401	829-4200	
Cojocari, Jim W., Grnhse, Wkr., Phyt. 2003 Gardner, Box 7618; 604 Charleston, Rd., Apt. 2-A, 27606	2778, 2779	851-8992
Cole, Anthony D., Agri'l. Res. Tech., Soil Sci. 2016 Fanning Bridge Rd., 28732-9628	704-684-3562	
Cole, Dr. James L., (Barbara), Assoc. Prof., Psy. 762-A Poe, Box 7801; Rt. 2, Box 183-C	2254	772-0482
Cole, James L., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 217 Cooke St., 27601	3323	755-1960
Cole, Peggy W., Libr. Asst., Illus. Interlibr. Loan, Box 7111; 4120 C3 Camelot Dr., 27609	2116	782-2513
Coleman, Dr. Samuel K., (Hiroko C. Kataoka), Assoc. Dir., Res. & Prog. Dev., N.C. Japan Ctr. 5 Rosemary St., Box 8112; 3900 Maplefield Dr., 27612	3185	847-1805
Coley, Tammy R., Wordprocessor, Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; Rt. 2, 110-D, Holly Springs 27540	829-4200	552-4029
Collender, Dr. Robert N., Asst. Prof., Ec. & Bus. 310-B Hillsborough Bldg., Box 8110	2885	

Name, Title, Department and Address	Office Phone	Resid. Phone
Collier, Frances W., Acct. Tech., Univ. Ext.	2177	834-4113
204-C McKimmon, Box 7401; 626 Woodburn Rd., 27605		
Collins, Carroll E., (Dr. Wanda W.), Instr., N.C. Crop Impr. Assn.	2851	362-0125
3709 Hillsborough St., Box 8604; 104 Talicud Trail, Apex 27502		
Collins, Cedric E., Hskp. Asst., Phys. Plant	3323	772-1554
Park Shops, Box 7219; 300 Haywood St., 27529		
Collins, Debra G., (Larry), Word Proc. Oper., SVM	829-4202	362-6615
4700 Hillsborough St., Box 8401; Rt. 3, Box 220, Apex 27502		
Collins, E. Lee, (Pat), Dir., Video Prod., IES	2601	851-3395
107-E Park Shops, Box 7902; 1701 Lorimer Rd., 27606		
Collins, Edwin B., (Patricia), Agri'l. Res. Tech., Ani. Sci.	3849	781-5102
Repro. Phys. Lab., 1400 Blue Ridge Rd., Box 7621; 5020 Stoneridge Dr., 27612		
Collins, Gladalea K., (Lowell), Acct. Clk., Admn. Serv., Engr.	2310	266-1038
101 Page, Box 7901; 208 Westover Dr., Knightdale 27545		
Collins, James P., Lab. Ani. Tech., Vet. Teach. Hosp., SVM	829-4200	829-1762
4700 Hillsborough St., Box 8401; 2706 Barmettler St.		
Collins, Jessie Mae, Hskp. Stu. Aff.	3340	821-3806
Univ. Stu. Ctr., Box 7306; 804 E. Lenoir St., Apt. C, 27601		
Collins, John N., (Grace), Ext. Prof. Emer., Agri'l. Ext. Serv.	834-9869	552-5748
401 Oberlin Rd., Room 106, 27605; 518 E. Academy, Fuquay-Varina 27526		
Collins, Dr. Wanda W., (Carroll), Assoc. Prof., Hort. Sci.	3167	362-0125
210 Kilgore, Box 7609; 144 Talicud Tr., Apex 27502		
Collins, Dr. William K., (Ann), Assoc. Dept. Head for Ext. & Spec. In Char., Crop Sci., Crop Sci. Ext.	2653	787-8569
2212 Williams, Box 7620; 4921 Carteret Dr., 27612		
Colquitt, Dr. Rosa, Asst. Prof., Adult & Comm. Coll. Educ.	3590	782-5756
310 Poe, Box 7801; 4773 Mill Village Rd., 27612		
Colvin, Cathie L., Analyst Prog., Micro, Path. & Parasit., SVM	829-4215	859-1870
4700 Hillsborough St., Box 8401; 4267 The Oaks Dr., 27606		
Combs, Bonnie J., Sec., Food Ani. & Equ. Med., SVM	829-4200	467-8667
4700 Hillsborough St., Box 8401; 409 Normandy St., Cary 27511		
Combs, Russell C., (Kae), Asst. Prof., Phys. Educ.	2487	851-0153
2009 Carmichael, Box 8111; 1216 Onslow Rd., 27606		
Comer, James F., Programmer, Ec. & Bus.	3041	832-7097
317-C Hillsborough Bldg., Box 8110; 2700 Vanderbilt Ave., 27607		
Compher, C. Jeffrey, Asst. Dir., Facil., Housing & Resid. Life	2410	
205 Harris, Box 7315; 4281 The Oaks Dr., 27606		
Cone, Thomas A., (Tonia), Agri'l. Res. Tech., Bio. & Agri'l. Engr.	3121	823-7408
Weaver Lab., Box 7625; Rt. 3, Box 245-A Tarboro 27886		
Conkling, Dr. Mark A., Asst. Prof., Gen.	2287	
2625-A Gardner, Box 7614; 5313 April Wind Dr., Fuquay-Varina 27526		
Conn, Raeford M., (Mary), Soil Phy. Prop. Lab. Mgr., Soil Sci.	3146	853-2875
840 Method Rd. Bldg. 2, Box 7619; Rt. 4, Box 399, Louisburg 27549		
Connally, Sam, Assoc. Dir., Pos. Mgmt. & Sal. Admin., Human Resou.	7175	829-9665
Admn. Ser. Ctr., Box 7210; 2724 Van Dyke Ave., 27607		
Conner, Joseph L., (Sue), Agri'l. Res. Tech., Hort. Sci.		
2016 Fanning Bridge Rd., Fletcher 2732-9628		704-684-3562
P.O. Box 145, Edneyville 28727		
Conniff, Lieselotte M., (Jack E.), Res. Tech., Plant Path.	2828	782-3303
3709 Hillsborough St., Box 8604; 3300 Felton Pl., 27612		
Conrad, Dr. Hans, (Emma), Prof., Mat. Engr.	7443	469-2788
223-B Riddick, Box 7907; 205 Glasgow Rd., Cary 27511		
Conrad, Teresa, (Dick), Order Typ., Purch. & Stores	2171	469-1522
Alumni, Box 7212; 104 Beloit Ct., Cary 27511		
Conway, Blessyng M., (Thomas), Clk.-Typ., Phys. Plant	2181	833-2881
Morris, Box 7219; 201 Bladen St., 27601		
Conway, Thomas E. H., Jr., (Mychele), Asst. Dir., Acad. Skills Prog.	2464	833-2881
124 Reynolds Coliseum, Box 7104		
Cook, Charles B., (Faye), Res. Asst., Elec. & Comp. Engr.	2878	783-6173
112 Daniels, Box 7911; 5957 Dixon Dr., 27609		
Cook, Eleanor I., Serials Cat. Librn., Serials	3584	929-6776
G116 Library, Box 7111; 9 Littlejohn Rd., Chapel Hill 27514		
Cook, Elizabeth A., Laun. Wkr., Laun.	2122	839-1159
Laundry, Box 7218; 3047 Richward Pl.		

Name, Title, Department and Address	Office Phone	Resid. Phone
Cook, Dr. James W., Jr., Asst. Prof., Physics 410B Cox Box 8202; 505 Tartan Cir., Apt. 4, 27606	2512	851-3891
Cook, Dr. Maurice G., (Nancy), Prof. Ext. Soils Spec., Soil Sci. 3403 Williams, Box 7619; 3458 Leonard St., 27607	3285	787-3021
Cook, Dr. Robert E., (Betty), Asst. Dir., Agri. Res. Serv., SALS 100-D Patterson, Box 7601; 3105 Cartwright, 27612	2718	782-1490
Cooke, Armand V., Assoc. Prof., Prod. Design 305-B Brooks, Box 7701; 2114 Timberlake Dr., 27604	2206	872-1906
Cooke, Gail K., (Charles W.), Libr. Tech. Asst., Serials G116B Library, Box 7111; 3504 Mercury Cir., 27604	3584	872-1326
Cooke, Grace B., Data Entry Oper., Dairy Rec. Proc. Ctr. Leazar, Box 7623; 925 Barringer Dr., 27606	2075	851-2022
Cooke, Henry C., (Venna Marie), Assoc. Prof. Emer., Math. 206 Harrelson, Box 8205; 3350 Hampton Rd., 27607	7884	787-4815
Cooley, Claude, Floor Maint. Asst., Phys. Plant Park Shops, Box 7219; Rt. 2, Box 467, Wendell 27591	3323	
Cooley, Clinton, (Marian), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 705 Blount St., Smithfield 27577	3323	
Cooper, Dr. Arthur W., (Jean), Head & Grad. Admin., For. 2018-B Biltmore, Box 8002; 719 Runnymede Rd., 27607	2891	787-9075
Cooper, Betty J., Clk., Recept., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 3606 Blue Ridge Rd., 27612	829-4200	782-7279
Cooper, Charles S., (Hazel), Sr. Engr. Ext. Spec., IES 215-N Page, Box 7902; 1412 Kershaw Dr., 27609	2358	787-0941
Cooper, Harvey B., (Buddy), (Jean), Elec., Phys. Plant Armory Shop, Box 7219; 3606 Blueridge Rd., 27612	3080	782-7279
Cooper, James E., Locksmith, Phys. Plant 8 Park Shops, Box 7219; 1701 Pershing Rd., 27608	3323	834-5773
Cooper, Joseph Vann, (Harvi), Res. Tech., Ani. Sci. 4616 Reedy Creek Rd., Unit 1, 27607; Box 7621; 527 Sorrell St., Cary 27511	2713	467-1979
Cooper, Karen L., (Brian), Sec., Soc. & Anth. 233 1911 Bldg., Box 8107; 625 Cardinal Gibbons Dr., Apt. 103, 27606	2491	834-7561
Cooper, Nelson E., (Rachel), Assoc. Prof., Phys. Educ. 2004 Carmichael, Box 8111; 109 Dublin Woods Dr., Cary 27511	2487	467-9747
Coots, Dr. Alonzo F., Assoc. Prof., Chem. 811 Dabney, Box 8204; 1517 Duplin Rd., 27607	2548	787-5518
Cope, Kimberly A., (Doug), Res. Tech., Food Ani. & Equ. Med., SVM 4700 Hillsborough St., Box 8401; 212 Winston Dr., Cary 27511	829-4200	481-1106
Cope, Dr. Will A., (Minnie), Prof. Emer., Crop Sci. Box 7620; 3710 Eakley Ct., 27606	2647	851-1879
Copeland, Dr. B. J., (Jean), Dir., UNC Sea Grant 105 1911 Bldg., Box 8605	2455	362-5494
Corbett, Donald W., (Anne), Agri'l. Res. Tech., Plant Path. 840 Method Rd., Unit II, Box 7628; Rt. 1, Box 259, Zebulon 27597	3330	269-7948
Corbett, E. Marcelle, (Frankie), Tech., Rad. Prot. 214 Clark, Box 7108; 3001 Gumtree Ct., 27610	2894	834-4468
Corbett, Frances G., (Marcelle), Libr. Asst., Ref. 1140 Library, Box 7111; 3001 Gumtree Ct., 27610	2935	834-4468
Corbett, Dr. Wayne T., Assoc. Prof., Epid., SVM 4700 Hillsborough St., Box 8401; 5812 Allwood Dr., 27606	829-4278	832-6194
Corbin, Dr. Frederick T., (Frances), Prof., Crop Sci. 4402F Williams, Box 7620; 4508 Leesville Rd., 27612	2511	787-5081
Corda, Susan L., Res. Tech., Plant Path. 3908 Inwood Rd., Box 7632; 126 Drummond Pl., Cary 27511	3575	467-2833
Cordell, Eugene, Hskp. Asst., Phys. Plant Park Shops, Box 7219; Rt. 3, Box 393, Spring Hope 27882	3323	478-3893
Cordes, Audrey W., Tech. Asst., Libr. 1121 Library, Box 7111; 2725 Van Dyke Ave., 27607	2603	
Cormack, Mary E., (Billy), Data Entry Oper., Dairy Rec. Proc. Ctr. Leazar, Box 7623; 6001 Cranberry Dr., 27609	2075	781-0576
Cornelius, Wayne L., (Jane), Assoc. Stat., Stat. 601-C Cox, Box 8203; 1213 DeBoy St., 27606	2531	851-4644
Cornell, Dr. Richard H., (Jean), Prof., Wood & Paper Sci. 2103 Biltmore, Box 8005; 116 Duncansby Ct., Cary 27511	2888	

Name, Title, Department and Address	Office Phone	Resid. Phone
Cornett, Joanne M., (Paul), Acct. Clk., Trans.	3424	772-7334
Admn. Serv. Ctr., Box 7221; 507 November St., Garner 27529		
Cornwell, Dr. John C., Assoc. Prof., Ani. Sci.	2764	851-1191
211-C Polk, Box 7621; 5317 Deep Valley Run, 27606		
Corpening, Vickie B., Clk.-Typ., Engl.	3870	
46 Tompkins, Box 8105; 2618 Cherry Cir., 27603		
Corter, Dr. Harold M., (Helen), Prof. Emer., Psy.	2253	833-9370
634-A Poe, Box 7801; 3211 Arthur Ct., 27607		
Corter, Phyllis B., (Ron), Clk.-Typ., Tob. Lit. Serv.	2836	269-6374
2314 Library, Box 7111; 620 Yates Place, Zebulon 27597		
Cortes, Dr. Dario A., (Diane), Assoc. Prof., For. Lang.	2475	787-7430
131 1911 Bldg., Box 8106; 2004 Ridge Rd., 27607		
Coster, Dr. John K., (Dorothy), Prof. & Dir., Occup. Educ.	2234	787-8641
602-M Poe, Box 7801; 424 Northbrook Dr., 27609		
Cotanch, Dr. Stephen R., Prof., Physics	2515	787-3144
408A Cox, Box 8202; 729 Blenheim Dr., 27612		
Cote, Donna M., Vet. Tech., Vet. Teach. Hosp., SVM	829-4200	
4700 Hillsborough St., Box 8401		
Cothren, Joseph E., (Elizabeth), Res. Engr., Bio. & Agri'l. Engr.	3101	755-0225
119 Weaver, Box 7625; 602 Gardner St., 27607		
Cotten, Delsey, Recept., Design	2208	
200 Brooks, Box 7701; 219 E. South St., 27601		
Cotten, Hattie W., (Jerry C.), Hskp. Supv., Phys. Plant	3323	828-4049
Park Shops, Box 7219; 2115 Dandridge Dr., 27610		
Cotten, Robert, Jr., (Annie B.), Hskp. Asst., Phys. Plant	3323	542-5803
Park Shops, Box 7219; Rt. 3 Box 54, Pittsboro 27312		
Cottle, Dot P., Typ., Poul. Sci.	2623	469-4820
101 Scott, Box 7608; 120 Byrum St., Cary 27511		
Cottle, Sylvia S., (Harold), Data Entry Clk., SSS	3117	834-6362
SSS, Box 7224; 1517 Westchester Rd., 27610		
Cotton, Audrey B., Teller, Credit Union	2686	
2802 Hillsborough St., Box 8609; 153C Jones Franklin Rd., 27606		
Cotton, Bobby R., Telecommunications Off., Public Safety	3206	
Field House, Box 7220		
Cotton, Isaac C., (Doris), Agri'l. Res. Asst., Biochem.	2709	832-3257
Nutr. Barn, Res. Unit 5, Western Blvd., Box 7622; 3532 Western Blvd., 27606		
Coulbourn, Lucy C., Dir., Info. Serv.	3470	467-5432
219 Oberlin Rd., Box 7504; 911 Sussex Ln., Cary 27511		
Council, Doris S., Libr. Clk., Acq. Libr.	3833	829-0980
3136 Library, Box 7111; 1826-B Gorman St., 27606		
Council, Pat, (Macon), Acct. Clk., Univ. Dining	7012	362-7430
3805 Beryl Rd., Box 7307; 101 Brookridge Dr., 27606		
Courchane, Dr. Marsha J., (David), Asst. Prof., Ec. & Bus.	3273	
Box 8109		
Courtney, Mary Ann E., (William B.), Libr. Clk., Periodicals	3136	834-4092
Library, Bix 7111; Q314 E. S. King Vlg., 27607		
Couto, Dr. Walter B., (Rosa), Res. Prog. Leader, REE, Soil Sci.	2838	
Apartado 248, Lima 100, Peru; Lima, Peru		
Coutu, Dr. Arthur J., (Jean), Prof., Ec. & Bus.	2258	782-3258
18-C Patterson, Box 8109; 3415 Wade Ave., 27607		
Covington, Dr. David H., (Janet), Asst. Prof., Engl.	3854	362-5693
122 Tompkins, Box 8105; 1417 Suterland Dr., Cary 27511		
Covington, David W., (Millie), Fac. Support Shop Supv.,		
Mech. & Aero. Engr.	2365	851-7709
2102 Broughton, Box 7910; 3914 Wendy Ln., 27606		
Covington, Henry M., (Elizabeth), Prof. Emer., Hort.		362-6160
614 W. Chatham St., Apex 27502		
Covington, Vann B., (Ann), Agri'l. Res. Tech., Ent.	3579, 3581	851-1561
Research Annex, Box 7630; 306 Wilmot Dr., 27606		
Cowden, Judy M., (Donald), Comp. Programmer, Admn. Comp. Serv.	3541	781-5917
Leazar, Lower Level, Box 7208; 4107-245 Deep Hollow Dr., 27612		
Cowen, Dr. Peter, (Roberta Morales), Asst. Prof.,		
Micro., Path. & Parasit., SVM	829-4321	469-4666
4700 Hillsborough St., Box 8401; 311 S. Maynard, Cary 27511		

Name, Title, Department and Address	Office Phone	Resid. Phone
Cowling, Dr. Ellis B., (Bettsy), Assoc. Dean, For. Resou., Asst. Dir., N. C. Agri. Res. Serv. ....2883	787-5733	
2028F Biltmore, Box 8001; 2310 Weymouth Ct., 27612		
Cox, Chandra D., Asst. Prof., Design ....3260		
201F Leazar, Box 7701; 500 N. Duke St. 56-101, 27701		
Cox, Deborah B., (Alan), Sec., Poul. Sci. Ext. ....2621	779-4439	
209 Scott, Box 7608; 316 Whithorne Dr., Garner 27529		
Cox, Dr. Ellen F., (James), Asst. Prof., Ec. & Bus. ....3951	493-3935	
205-B Patterson, Box 8109; 3946 St. Marks Rd., Durham 27707		
Cox, Dr. Fred R., (Edie), Prof., Soil Sci. ....2388	851-1295	
3207 Williams, Box 7619; 5010 Dunbar Rd., 27606		
Cox, George B., (Amelia), Agri'l. Res. Tech., Hort. Sci. ....704-684-3562		
#8 Williamson Rd., Horse Shoe 28742 ....704-891-9524		
Cox, Joseph H., (Betsy), Prof. Emer., Design ....2205	851-6787	
302 Brooks, Box 7701; 1132 Trailwood Dr., 27606		
Cox, Dr. Walter L., Jr., (Janet), Assoc. Prof. Emer, Ind. Arts/Occup. Educ. ....2234	876-2671	
300-P Poe, Box 7801; 3409 Victor Pl., 27604		
Cozzens, Jimi, Acct. Supv., Univ. Dining ....7012		
3805 Beryl Rd, Box 7307		
Crabtree, Bertha L., (Ralph), Res. Tech., Soil Sci. ....2636	553-7381	
3315 Williams, Box 7619; 1306 Tulip St., Clayton 27520		
Crabtree, Kenneth K., Elect. Tech., Text. ....3074		
B-6 Nelson, Box 8301		
Crabtree, Kenneth W., Agri'l Res. Tech., Ent. ....3804	553-4369	
1131 Grinnells, Box 7626; 2950 Davis Rd., Clayton, 27520		
Crabtree, Paula G., Asst. Mgr., NC DHIA Dairy Lab., Ani. Sci. ....2822	787-4006	
110 Leazar, Box 7621; 5736 Forest Lawn Dr., 27609		
Crabtree, Ronald L., Electronics Tech., Phys. Plant ....3323	772-1553	
115-A Morris, Box 7219; 3067 Lakeview Dr., 27603		
Craig, Dr. H. Bradford, (Doris), Assoc. Dir., Acad. Aff. & Dir. Agri'l. Inst., Agri. & Life Sci. ....3248	787-4638	
107 Patterson, Box 7601; 3405 Ocotea St., 27607		
Craig, William A., Jr., (Kim), Supv., Clin. Immuno. Lab., Vet. Teach. Hosp., SVM ....829-4200	782-2789	
4700 Hillsborough St., Box 8401; 3202 Mill Run Rd., 27612		
Cram, Sharon L., (Gary), Sec., Chem. Engr. ....2325	848-9293	
224 Riddick, Box 7905; 709 Lanhan Pl., 27609		
Crane, Dr. Stephen W., Prof. & Dept. Head, Comp. Ani. & Sp. Species Med.-SVM ....829-4230		
4700 Hillsborough St., Box 8401		
Cranford, Jimmie D., (Elizabeth), Res. Tech., Ent. ....3771	556-4204	
2317 Gardner, Box 7613; Rt. 2, Box 139B, Wake Forest 27587		
Creech, Billy R., (Earline), Act. Plant Main. Supv., Phys. Plant ....2184	829-9118	
Heating Plant, Box 7219; 611 Harding St., 27604		
Creech, Richard H., Hskp. Asst., Phys. Plant ....3323	831-9875	
Park Shops, Box 7219; 3027 Jolston Lane, Apt. C, Wakefield Apts., 27610		
Creech, Susan M., (Mike), Res. Tech., Poul. Sci. ....2628	828-9200	
8 Scott, Box 7608; 1810 Medfield Rd., 27607		
Creed, Elizabeth L., Res. Tech., Mar., Earth & Atmos. Sci. ....7840	832-1004	
139 Withers, Box 8208; 811 Chamberlain St., 27607		
Creekmore, Joan M., (Wallace), Acct. Tech., Payr. & Ben. ....2151	478-4184	
Admn. Serv. Ctr., Box 7215; 300 Branch St., Box 895, Spring Hope 27882		
Creekmore, Willie G., Steam Plant Supv., Phys. Plant ....2184	269-4297	
Heating Plant, Box 7219; Rt. 1, Box 644, Spring Hope 27882		
Crenshaw, Thomas R., Elec. Apprentice, Phys. Plant ....3080		
Armory Shop, Box 7219; 528½ Bragg St., 27610		
Cribbins, Dr. Paul D., (Anne), Prof., Civil Engr. ....2331	787-5413	
423 Mann, Box 7908; 3416 Noel Ct., 27607		
Crickenberger, Dr. Roger G., (Rose), Assoc. Prof., Ani. Sci., Spec.-in-Charge, Ext. Ani. Husb. ....2761	934-9891	
117 Polk, Box 7621; 3200 Johnson Rd., Clayton 27520		
Crider, Brenda E., (Ted), Analyst Programmer, Admn. Comp. Serv. ....3640	469-2784	
1212 Blue Ridge Rd., Box 7227; 116 Abbots Glen Cr., Cary 27511		

Name, Title, Department and Address	Office Phone	Resid. Phone
Crippen, Devany L., (Karen), Truck Driver, Food Sci. 12 Schaub, Box 7624; 1337 Mordecai Dr., 27604	2760	832-3057
Crisp, D. Lynn, (James), Libr. Technical Asst. 209 Brooks, Box 7701; 1005 W. Lenoir St., 27603	2207	829-1242
Crisp, Dr. James E., (D. Lynn), Asst. Prof., Hist. 156 Harrelson, Box 8108; 1005 W. Lenoir St., 27603	2485	829-1242
Crocker, Teresa, Sgt., Patrol Off., Public Safety Field House, Box 7220	3206	
Croom, Dr. W. James, (Mary Jo), Assoc. Prof., Ani. Sci. 319 Polk, Box 7621	2773	
Cross, Bobbi P., (Jerry), Sec., Speech-Comm. 214 Winston, Box 8104; 716 Valerie Dr., 27606	2450	851-0064
Cross, Deborah L., (Leonard), Acct. Tech., Bot. 2214 Gardner, Box 7612; 107 Tiara Ct., Garner 27529	3806	
Cross, Sue J., (Robbie), Sec., Univ. Stu. Ctr. 3111 Univ. Stu. Ctr., Box 7306; 5208 Penny Rd., 27606	2835	828-6127
Cross, Thomas F., (Lelia), Labor Crew Ldr., Phys. Plant 18 Riddick Stad., Box 7219; 801-F Vardarman St., 27610	3479	834-1487
Crossland, Dr. Cathy L., (Gordon), Assoc. Prof., Curr. & Instr. 402-C Poe, Box 7801; 2204 Lash Ave., 27607	3221	783-5135
Crotts, Delores S., (Bob), Clk.-Typ., Microb. Elect. Micros. Ctr. 1230 Gardner, Box 7615; 103 Brandywine Dr., 27607	2664	851-0178
Crouch, Henry L., (Fay), Instr. Emer., Math. 3609 Raulo Dr., 27612		787-8643
Crow, Dr. John L., (Joanne), Asst. Prof., Graphic Comm./Occup. Educ. 510-D Poe, Box 7801; 407 Rutherglen Dr., Cary 27511	2234	469-0788
Crowder, Dr. Larry B., (Judy), Asst. Prof., Zool. 3105 Gardner, Box 7617; 1508 Banbury Rd., 27607	2741	782-2093
Crudup, William E., (Winifred), Gen. Util. Wkr., Phyto. 2003 Gardner, Box 7618; 5013 Royal Acre Dr., 27610	2778	772-8240
Crump, Josie, (Phil), Clk.-Typ., Media Serv., Hum. & Soc. Sci. G-116 Tompkins, Box 8101; Rt. 3, Box 167, Garner 27529	3334	772-3928
Crump, Kelly R., (Pat), Dir., Con. Educ. & Prof. Dev. 147-I McKimmon, Box 7401; 6721 Holly Springs Rd., 27606	3007	851-1782
Crumpler, David E., Agri'l. Res. Asst., Poul. Sci. Univ. Res. Farm 2; 1108 Rand Rd.	3446	772-1833
Cuculo, Dr. John A., (Eve), Celanese Prof., Fiber & Polymer Sci., Text. Chem. 105 Clark, Box 8302; Rt. 6, 1900 Rangecrest Rd., 27612	2551	848-1019
Cudd, John F., Jr., (Vicki), Asst. Dir., Lifelong Educ., Dir., Sum. Sess., Lifelong Educ. 145-C McKimmon, Box 7401; 1117 Yorkshire Dr., Cary 27511	2265	467-6951
Cudd, Vicki W., (John), Sec., IES 215-B Page, Box 7902; 1117 Yorkshire Dr., Cary 27511	3262	467-6951
Culbreth, Dr. C. Thomas, Jr., Asst. Prof. in Charge, Furn. Mfg. & Mgmt. Ind. Engr., Furn. Mfg. & Mgmt. 341 Riddick, Box 7906; 7204 Ray Rd., 27612	3335	848-1375
Culkin, Dr. David F., Asst. Prof., Rec. Resou. Admin. 4008J Biltmore, Box 8004; Rt. 3, Box 341-FA, Fuquay 27526	3276	552-6963
Cullen, Dr. John M., (Frayda), Asst. Prof., Micro., Path., & Parasit., SVM 4700 Hillsborough St., Box 8401; 611 E. Olive St., Apex 27502	829-4200	362-5675
Cummings, Connie A., Agri'l Res. Asst., Poul. Sci. 4108 Lake Wheeler Rd.; 1510 Gorman St., 27606	2740	833-4752
Cummings, Dr. George A., (Ruth), Prof., Soil Sci. 3407 Williams, Box 7619; 1532 Dellwood Dr., 27607	2600	787-4244
Cummings, Lisa N., (Glen A.), Elec. Tech., Comp. Sci. Leazar, Box 8206; 102 Village Ct., Garner 27529	7180	779-0227
Cummings, Marie S., (Phil), Admn. Sec., Poul. Sci. 120 Scott, Box 7608; Rt. 2, Box 59-1, Apex 27502	2626	362-7381
Cummings, Dr. Ralph W., (Mary P.), Prof. Emer., Soil Sci. 812 Rosemont Ave., 27607		833-1863
Cuneo, Major Jeffrey A., (Elizabeth), Asst. Prof., Aero Studies, AFROTC 145 Reynolds Coliseum, Box 7308; 1410 Highland Tr., Cary 27511	2417	481-0630

Name, Title, Department and Address	Office Phone	Resid. Phone
Cunningham, James W., Chief, Public Safety 101 Field House, Box 7220	2157	
Cunningham, Dr. Joseph W., (Patricia), Prof., Psy. 621 Poe, Box 7801; 105 Hoy, Cary 27511	2251	467-3631
Cunningham, Mary K., Instr., Rel., Phil. & Rel. G-110 Winston, Box 8103; 2517 Clark Ave., 27607	3214	755-1011
Cupitt, Mary M., (Larry), Lect., Math. 344 Harrelson, Box 8205; 1326 Doylin Dr., Cary 27511	2281	467-7203
Cure, Dr. William W., (Jennifer), Res. Assoc., For. Field Site, 3908 Inwood Rd., Box 7632; 17 Bagwell Ave., 27607	3575	834-3225
Curlee, Ruth F., (Sandy), Sec., Wolfpack Club College Inn, Box 8602; P. O. Box 552, Cary 27511	2112	851-2064
Curley, Nathaniel, (Linda), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 500 Rock Quarry Rd., 27610	3323	834-5918
Currie, Minnie L, (William), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 1829 Eastern Blvd., 27610	3323	832-5102
Currie, Raleigh, Mason, Phys. Plant Sullivan Dr., Box 7219; 300 Haywood St., Garner 27529	3408	772-0010
Currin, Benjamin M., (Mary), Res. Tech., Zool. 4112 Gardner, Box 7617; 2434 Medway Dr., 27608	3583	834-4867
Currin, Richard D., Jr., Res. Tech., Bio. & Agri'l. Engr. 134 Weaver, Box 7625; 601 G Charleston Rd., 27606	3121	851-6440
Curtin, Betty A., (T.M.), Sec., Stu. Govt. 4130 Univ. Stu. Ctr., Box 7306; 3939 Glenwood Ave., Apt. 610, 27612	2797	782-2206
Curtin, Dr. Terrence M., Dean, SVM 4700 Hillsborough St., Box 8401; 3312 Bearskin Ct., 27606	829-4210	851-2135
Curtis, Barbara C., (Steve), Res. Tech., Comp. Ani. & Sp. Species Med., SVM 4700 Hillsborough St., Box 8401; 107 Montgomery St., 27607	829-4200	832-1153
Curtis, Cynthia J., Cash., Univ. Dining Univ. Stu. Ctr., Box 7307; 5405-10 Portree Place, 27606	2021	851-7243
Curtis, Emily L., Sec., Coop. Educ., Prov. Off. M-5 Link Bldg., Box 7110	2199	
Curtis, Sophia A., (Ray O.), Acct. Clk., Acct. Pay. 213 Admn. Serv. Ctr., Box 7204; 4209 Rowan St., 27609	2130	781-7131
Curtis, Dr. Stephanie E., (Ron Swanstrom), Asst. Prof., Gen. 3603 Gardner, Box 7614; 113 Spring Valley Rd., Carrboro 27510	2294	929-2056

D

Daeschel, Dr. Mark A., (Inge), Asst. Prof., Food Sci., USDA 322-B Schaub, Box 7624; 5329 Thistlebrook Ct., 27610	2979	821-2359
Dahle, Dr. Robert D., (Anne), Ext. Prof., Ec. & Bus. 311B Hillsborough Bldg., Box 8110; 3227 Birnamwood Rd., 27607	2885	782-6173
Dahms, Dr. Kay L., Intern, Sm. Ani., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401	829-4200	
Dail, Philip R., Instr., Chem. 219 Dabney, Box 8204; 1416 Ewing Dr., Garner 27529	2296	779-1333
Dail, Teresa W., (Michael), Sec., Stu. Accts. 2 Peele, Box 7213; Rt. 10, Box 275-H, 27603	2986	779-3608
Dale, Linda G., Stu. Pers. Coord., Univ. Dining 217 Harris, Box 7307; 1901 Tischer Rd. Apt. B, 27603	3090	851-2852
Dalla-Pozza, Ada B., (Martin), Prof. Emer., Agri'l. Ext. Serv. 535 E. Cornwall Rd., Cary 27511		
Dalton, Deborah, (Eppi PaziENZA), Asst. Prof., Design 321 Brooks, Box 7701; 3105 Ruffin St., 27607	2205, 2206	834-0946
Danby, Dr. J. M. Anthony, (Phyllis), Prof., Math. 316 Harrelson, Box 8205; 707 Lakestone Dr., 27609	3210	787-6018
Dandridge, Dr. Edmund P., (Berenice), Assoc. Prof. Emer., Engl. 4316 W. Galax Dr., 27612		787-2703
Danehower, Dr. David A., Asst. Prof., Crop Sci. 4324-A Williams, Box 7620; Rt. 6, Box 127, Apex 27502	3216	779-0393

Name, Title, Department and Address	Office Phone	Resid. Phone
Dang, Tin T., Maint. Mech. Phys. Plant 4700 Hillsborough St., Box 8401; 108 Hilary Pl., Cary 27511	829-4216	469-8813
Daniel, Dorsey W., (Pauline), Spec., Crop Sci. 3709 Hillsborough St., Box 8604; Rt. 3, Dunn 28334	2827	897-7520
Daniel, Elsie M., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 813 Postell St., 27601	3323	821-1920
Daniel, Harry T., (Sarah), Asst. to Head & Sched. Off., Ec. & Bus. 201-G Patterson, Box 8109; 8325 Six Forks Rd., 27609	3273	847-6256
Daniel, Nola P., Data Entry Oper., Dairy Rec. Proc. Ctr. Leazar, Box 7623; Rt. 2, Box 46, Wake Forest 27587	2075	556-5743
Daniel, William L., (Claudia), Ec. & Bus. 317 Hillsborough Bldg., Box 8110; 3809 Camaro Ct., 27604	3041	876-1542
Daniels, Elizabeth, Clk.-Typ., Mech. & Aero. Engr. 3211 Broughton, Box 7910; 1402-C Gorman St., 27606	2365	821-2635
Daniels, Jerry M., (Betsy C.), Assoc. Prof., Phys. Educ. 2030 Carmichael, Box 8111; 704 Blenheim Dr., 27612	2487	787-1734
Daniels, Dr. Raymond B., (Irene), Vis., Prof., Soil Sci. 3403 Williams, Box 7619; 9112 Leesville Rd., 27612	3285	848-1371
Danielson, Dr. Leon E., (Sue), Assoc. Prof., Ec. & Bus. 215 Patterson, Box 8109; 6508 Wrenwood Ave., 27607	2256	851-4909
Darden, Caffie A., Clk.-Typ., Elec. & Comp. Engr. 237 Daniels, Box 7911; 321 Cartwright Cir., Wendell 27591	2336	
Darney, Dr. Kirwin J., Jr., (Sally), Res. Assoc., Zool. 1608 Gardner, Box 7617; 1128 Ashford Ln., Cary 27511	3883	467-8451
Daub, Dr. Margaret E., (John Chisnell), Asst. Prof., Plant Path. 2506 Gardner, Box 7616; 1208 Chaney Rd., 27606	2735	851-7408
Daughtry, Billy I., (Margaret), Agri'l. Res. Tech., Plant Path. 840 Method Rd., Unit III, Box 7629; 516 S. Barbour St., Clayton 27520	3966	553-6687
Daughtry, J. A., (Lois), Maint. Mech., Plant Path. 2521-A Gardner, Box 7616; 702 Wilson Mill Rd., Smithfield 27577	2735	934-6164
Dauterman, Dr. Walter C., (Barbara), Prof., Ent. Unit 4, Method, Box 7633; 4227 Arbutus Dr., 27612	2274	782-1827
Davenport, Adra L., Sec., Ec. & Bus. 213 Hillsborough Bldg., Box 8110; 2209 Candyflower Pl., 27610	3884	
Davenport, Donald A., (Celia), Agri'l. Res. Tech., Soil Sci. Rt. 2, Box 141, Tidewater Res. Sta., Plymouth 27962; Rt. 1, Box 245, Roper 27970	793-4118	793-2381
Davenport, Dr. Donald G., (Betty M.), Prof., Ani. Sci. 245-A Polk, Box 7621; 3311 Churchill Rd., 27607	2766	787-2681
Davenport, James R., (Nina), Maint. Engr. Univ. Stu. Ctr., Box 7306; 1929 Hawkins St., 27610	3340	821-7757
Davey, Dr. Charles B., (Beth), Prof., For. 2028 Biltmore, Box 8002; 3704 Bryn Mawr, 27606	2883	851-1168
David, Dr. Joseph W., Asst. Prof., Mech. & Aero. Engr. 2407 Broughton, Box 7910; 117 Burkewood Ln., 27609	2365	
Davidson, Dr. Michael G., (Teresa), Resid., Ophthalmology, SVM 4700 Hillsborough St., Box 8401; 5023C Ft. Sumter Rd., 27606	829-4200	851-9464
Davis, Dr. Adam Clarke, Assoc. Prof., Soc. & Anth. 337 1911 Bldg., Box 8107; 4213 Boxwood Dr., 27612	2702	787-1751
Davis, Anne L., Sec., Engr. 115 Page, Box 7901; 4213 Boxwood Rd., 27612	2315	787-1751
Davis, Anthony D., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 105 Harper St., 27529	3323	
Davis, Clark G., Stock Clk., Phys. Educ. 1217E Carmichael, Box 8111; 1808 Teedee St., 27610	3508	
Davis, Dr. David E., Prof. Emer., Zool. 777 Picacho Ln., Santa Barbara, CA 93108		805-969-6077
Davis, David H., (Karen), Res. Tech., Zool. Box 537, Fletcher 28732		704-684-5757
		704-891-3365
Davis, Dr. Edward W., Jr., (Jo Ann), Assoc. Prof., Comp. Sci. 131H Daniels, Box 8206; 6013 Splitrock Tr., Apex 27502	7045	772-9681

Name, Title, Department and Address	Office Phone	Resid. Phone
Davis, Elaine A., Lab. Ani. Tech., Lab. Ani. Resou., SVM 829-4201 4700 Hillsborough St., Box 8401; 7309-B Post Oak Rd., 27609		
Davis, Ginger P., (Ben), Clk.-Typ., Work Ctr. 2991 128 Morris, Box 7219; 2313 Grant Ave., 27608		821-2293
Davis, Glenda F., Res. Tech., Nuc. Engr. 3347 B-104 Burlington, Box 7909; 101G Merriwood Dr., Cary 27511		
Davis, Henry, Jr., Carpenter, Phys. Plant 3323 Park Shops, Box 7219; 604 E. Hargett St., 27601		834-3188
Davis, Dr. Jerry M., (Jinnie), Prof., Mar., Earth & Atmos. Sci. 7243 414 Withers, Box 8208; 105 Beaver Pine Way, Cary 27511		469-4682
Davis, Dr. Jinnie Y., (Jerry), Asst. to the Dir. for Planning, Online Sys. Spec., Libr. 2680 1124 Library, Box 7111; 105 Beaver Pine Way, Cary 27511		469-4682
Davis, Dr. Judith A., Asst. Prof., Health Occup., Occup. Educ. 2234 502-K Poe, Box 7801; Rt. 3, Box 140E, Carthage 28327		949-2906
Davis, Karen L., Agri'l Res. Tech., Ani. Sci. 2769 232C Polk, Box 7621; 2105 Timber Dr., 27604		755-1359
Davis, Kathryn L., Lect., Phys. Educ. 2487, 2488 2029 Carmichael, Box 8111; 703 Powell St., Garner 27529		772-9773
Davis, Kimberly A., Libr. Clk., Ser.-Acqs. 3188 3136 Library, Box 7111; 625-107 Cardinal Gibbons Dr., 27606		834-0722
Davis, Dr. Michael A., (Ann), Assoc. Ext. State 4-H Ldr., Spec.-in-Charge, Asst. Prof., Ext. 4-H & Youth Dev. 3242 200 Ricks, Box 7606		469-8507
Davis, Nancy K., Comm. Spec., UNC Sea Grant 2454 105 1911 Bldg., Box 8605; 401B-2 Gooseneck Dr., Cary 27511		481-2225
Davis, Dr. Nancy L., (Steve), Res. Assoc., Microb. 2393 4602 Gardner, Box 7615; 415 Sharon Rd., Chapel Hill 27514		967-3989
Davis, Patricia A., Coord., Handicapped Stud. Serv., Counseling Ctr. 7653 200 Harris, Box 7312		
Davis, Paul L., Grnhse. Wrk. Phys. Plant 3408 Sullivan Dr., Box 7219; 2200 Henslowe Dr., 27603		833-4464
Davis, Phillip H., (Margaret B.), Assoc. Prof. Emer., Engl. 814 Woodburn Rd., 27605		832-4827
Davis, Psyche D., Quality Control Oper., Food Sci. 2760 13 Schaub, Box 7624; 7220 Gumwood Lane, 27609		878-7970
Davis, Dr. Robert F., (Jan), Dir., Mat. Res. Ctr., Prof., Mat. Engr. 3272 141A Riddick, Box 7907; 809 Runnymede Rd., 27607-3501		783-5648
Davis, Robert L., (Frances), Crop Sci. Ext. Spec., Crop Sci. Ext. 516 Test Farm Rd., Waynesville 28786 704-452-5608 203 Assembly St., Waynesville 28786 704-452-5653		
Davis, Susan H., (Tony), Acct. Tech., USDA-ARS 2731 51 Kilgore, Box 7610; 133 Sycamore St., Cary 27511		467-3452
Davis, Walter, Laborer, Phys. Plant 3408 Sullivan Dr., Box 7219; 1355 Branch St., 27601		829-0649
Davis, Dr. William R., (Robin), Prof., Physics 2512 Box 8202; 410-E Cody St., Cary 27511		828-7374
Davis, William T., Maint. Mech., Phys. Plant 3323 Park Shops, Box 7219; 604 Durham St., Clayton 27520		553-6440
Davis-Gardner, Angela M., Lect. Engl. 3870 268 Tompkins, Box 8105; 312 Oakwood Ave., 27601		833-0551
Davison, Barbara L., Medical Illus., Biomed. Comm. Ctr., SVM 829-4206 4700 Hillsborough St., Box 8401; 2327 Lyon St., 27608		834-5698
Davison, Harold L., (Rosemary), Lect., Math. 3304 229 Harrelson, Box 8205; 921 Cindy St., Cary 27511		467-1952
Davison, John C., Printing Equip. Oper., Text. Ext. 3761 201-F Nelson, Box 8301; Box 25517, 27611		772-4339
Dawson, Dr. Cleburn G., (Wilhelmina), Asst. Prof., Soc. & Anth. 2491 231 1911 Bldg., Box 8107; 1105 Buffaloe Rd., Garner 27529		772-0630
Dawson, Frank M., Hskp. Asst., Phys. Plant 3323 Park Shops, Box 7219; Rt. 1, Box 150; Bailey 27807		
Dawson, Sandra K., Agri'l Res. Tech., Crop Sci. 3905 3127 Ligon St., Box 7631; 5405-4 Portree Pl., 27606		859-1356

Name, Title, Department and Address	Office Phone	Resid. Phone
Dawson, Shelba H., (Gene), Empl. Spec., Human Resou.	2137	552-4097
Admn. Serv. Ctr., Box 7210; P. O. Box 395, Holly Springs 27540		
Daykin, Dr. Marilyn E., Agri'l. Res. Tech., Plant Path.	2752	878-9549
3420 Gardner, Box 7616; 5703 Grassmere Ct., 27609		
Dayton, Madeline I., Sec., Hort. Sci.	3283, 3284	782-4769
258 Kilgore, Box 7609; 1004 Canterbury Rd., 27607		
Deal, Dr. Earl L., (Betsy), Assoc. Prof., Spec., Ext. For. Resou.	3386	782-3975
3036C Biltmore, Box 8003; 3618 Corbin St., 27612		
Dean, Julie A., Technical Media Spec., IES	2356	828-1319
207 Page, Box 7902; 1400 Park Dr., 27605		
Dean, Sonya M., (David), Libr. Asst., Docu.	3370	269-4661
Library, Box 7111; 612 N. Church St., Zebulon 27597		
DeAngelis, Dr. Jack D., Ext. Spec., Ent.	2703	851-6622
3315 Gardner, Box 7613; 3100J Walnut Creek Pkwy., 27606		
Dearmon, Mark B., Media Spec., Agri'l. Comm.	2861	967-7608
G-2 Ricks Annex, Box 7603; 604 Tinkerbell Rd., Chapel Hill 27514		
DeArmond, Dr. M. Keith, (Anna), Prof., Chem.	2943	469-3757
618-A Dabney, Box 8204; 102 Abernathy Court, Cary 27511		
Deaton, Bryant L., (Jane), Mgr. Fin. & Bus., Admn. Comp. Serv.	3640	848-3515
1212 Blue Ridge Rd., Box 7227; 8312 North Creek Run, 27612		
DeBerry, Audrey U., (Vernell), Sec., Resid. Life, E.S. King Vlg.	2430	
Bldg P., King Vlg., Box 7315; 904 Belmont Dr., 27610		
DeBerry, Lorena C., (Jackie), Sec., Soc. & Anth.	3114	828-4802
305 1911 Bldg., Box 8107; 2204 Rumson Rd., 27610		
Debnam, Alanda R., (Geraldine), Main. Mech., Spec. Proj. E.S. King Vlg.	2430	
Bldg. P, E.S. King Vlg., Box 7315; 3113 Snowberry Dr., 27610		
Debnam, Christopher L., Hskp. Asst., Phys. Plant	3323	
Park Shops, Box 7219; 619 Church St., 27610		
Debnam, Claude E., (Jorean), Prod. Asst., UNC Ctr. for Pub. TV	2853	832-3192
TV Ctr., Box 8601; 2305 Rock Quarry Rd., 27610		
Debnam, Eloise T., (Joshua), Res. Aide, Microb.	2391	832-0623
4509 Gardner, Box 7615; 1604 Bennett St., 27604		
Debo, Roger L., Asst. Swim Coach, Athl.	3507	859-2532
Case Athl. Ctr., Box 8501; 5240 Portree #12		
DeBruhl, Ray F., (Shirley), Ext. Spec., Civil Engr.	2331	467-8819
213 Mann, Box 7908; 625 Ashe Ave., Cary 27511		
deBruyne, Dorothy A., (Jim Tillotson), Res. Analyst, Bio. & Agri'l. Engr.	3121	467-5084
270 Weaver, Box 7625; 100 Ralph Dr., Cary 27511		
De Buysscher, Dr. Edward V. L., (Rose), Assoc. Prof., Microb., Path. & Parasit.-SVM	829-4253	469-2797
4700 Hillsborough St., Box 8401; 6400 Misty Ridge Rd., Holly Springs, 27540		
Decker, Dr. Dwight W., Asst. Prof., Math	7440	
313 Harrelson, Box 8205		
Dedrick, Cynthia H., (Robin), Sec. Pers., Agri'l. Ext. Serv.	2814	556-2848
109 Ricks, Box 7602; Rt. 1, Lot 2, Wake Forest 27587		
DeGrand, Alexander J., (Linda), Prof. & Head, Hist.	3307	829-1547
158 Harrelson, Box 8108; 1311 Williamson St., 27608		
De Hertogh, Dr. August A., Prof. & Head, Hort. Sci.	3131	781-3491
120 Kilgore, Box 7609; 5900 Timbercreek Lane, Apt. 1111, 27612		
Deitz, Dr. Lewis L., Asst. Prof., Ent.	2833	828-1477
4322 Gardner, Box 7613; 3601 Marcom St., 27606, Cary 27511		
DeJarnette, Dr. Fred R., (Nadene), Prof., Mech. & Aero. Engr.	2365	467-6205
3229 Broughton, Box 7910; 934 Pamlico Dr., Cary 27511		
deJesus, Sergio Correa, (Maria), Vis. Asst. Prof., Design.	2205	851-9307
317 Brooks, Box 7701; 3110-K Walnut Creek Pkwy., 27606		
DeJoy, Dr. Daniel A., Asst. Prof., Speech Comm.	3204	848-6905
226 Winston, Box 8104; 8804 Royal Wood Ct., 27612		
delCastillo, Dr. Dennis T., Vis. Asst. Prof., Pichis Proj., Int'l. Agri.	2258	
N.C. Mission to Peru, Apartado 248, Lima, Peru; Box 8109		
Della Fave, Dr. L. Richard, (Maxine), Assoc. Prof., Soc. & Anth.	3114	787-8396
314 1911 Bldg., Box 8107; 6021 Wintergreen Dr., 27609		
Dellinger, Sandra A., Spec., Housing & House Furn., Agri'l. Ext.	2770	832-5368
210 Ricks, Box 7605; 1908 Sunset Dr., 27608		

Name, Title, Department and Address	Office Phone	Resid. Phone
Delsanto, Earl R., Rad. Tech., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 3912 Saratoga Dr., 27607	829-4200	872-7207
DeLuca, Cynthia A., (Bill), Sec., Stat. 110 Cox, Box 8203	2528	779-1577
DeLuca, Dr. V. William, (Cindy), Asst. Prof., Ind. Arts, Occup. Educ. 300-J Poe, Box 7801; 903 Atchinson St., Garner 27529	2234	779-1577
DeMaria, Dr. Mark, Asst. Prof., Mar., Earth & Atmos. Sci. 301 Withers, Box 8208	7977	
DeMaster, Dr. David J., (Vicki), Assoc. Prof., Mar. Earth & Atmos. Sci. 332 Withers, Box 8208; 207 Marilyn Cir., Cary 27511	7026	469-0756
De Mont, Astrid E., (David J.), Libr. Asst., Gov. Docu. 2110 Library, Box 7111; 652 S. Lakeside Dr., 27606	3280	851-5557
Denig, Dr. Joseph, (Sarah), Ext. Asst. Prof., Ext. For. Res. 3028B Biltmore, Box 8003; 505 Holtz Ln., Cary 27511	3386	
Denig, Sarah, (Joseph), Clk.-Typ., Trans. Box 7221; 505 Holtz Ln., 27511	3424	
Denke, Mark, (Nancy), Assoc. Dir., Housing & Resid. Life 204 Harris, Box 7315	2410	
Denmark, Joyce C., (L. J.), Sec., Plant Path. 3413 Gardner, Box 7616; 1005 Wilshire Dr., Cary 27511	2751	467-2736
Denning, Cary M., Dairy Plant Oper., Food Sci. 13 Schaub, Box 7624; Rt. 1, Box 7270, Willow Springs 27592	2760	552-5506
Denny, Carmen W., (Chris), Sec., Curr. & Inst. 402 Poe, Box 7801; 2300 Avent Ferry Rd., 27606	3221	829-9506
Dent, Faye M., (Charles), Admn. Sec., Comp Graphics Ctr. 338 Daniels, Box 7106; 112 Merlin Dr., Knightdale 27545	3430	266-3845
Dent, Renee, Reg. Clk., Reg. & Rec. 100 Harris, Box 7313; 410 E. Pine Ave., Wake Forest 27587	2576	
Denton, Dr. H. Paul, (Glenda), Asst. Prof., Soil Sci. 3403 Williams., Box 7619; 4101 Winston Rd., Clayton 27520	3285	553-3526
Desai, Bhakti S., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 2932 Ligon St., 27607	3323	755-1141
Deters, Barbara G., Libr. Clk., Circ. Library, Box 7111; 807 Beaver Dam Rd., 27607	3364	832-7668
Deters, MaryJane R. Acct. Clk., Capital Assets Acct. 213 Admn. Serv. Ctr., Box 7205; 7105 Sandringham Dr., 27612	2148	787-3546
DeVere, Marty, Box Off. Mgr., Stewart Thea. 1202-C Univ. Stu. Ctr., Box 7306	3104	
Devine, Dr. Hugh A., (Nancy), Prof., Rec. Resou. Admn. 4008-D Biltmore, Box 8004; 1414 Brunson Ct., Cary 27511	3276	467-8432
de Vries, Jan, (Diane), Mech., Phys. Plant 8 Riddick Stad., Box 7219; 2250 Charles Dr., 27612	3749	781-4828
Dew, Dr. Paul E., (Alice), Asst. Dir., Agri'l. Ext. 108 Ricks, Box 7602; 4305 Yadkin Dr., 27609	2813	787-5752
Dewar, Barbara W., Clk.-Typ., Math. 255 Harrelson, Box 8205; P.O. Box 600, Apex 27502	2382	362-5472
Dewhirst, Dr. Mark W., Adj. Asst. Prof., Anat., Physiol. Sci. & Radiol., SVM Duke Univ. Medical Ctr., Durham; Box 8401		
DeWitt, Dana, Lect., Engl. 244 Tompkins, Box 8105; 521 N. East St., #3, 27604	3870	833-8272
DeWitt, Jim L., (Linda), Asst. Prof., Phys. Educ. 2016E Carmichael, Box 8111; 917 Hillview Dr., Cary 27511	2487	467-8611
DeYoung, Bonnie A., (Dr. David J.), Res. Tech., Comp. Ani. & Sp. Species Med., SVM 4700 Hillsborough St., Box 8401	829-4376	
DeYoung, Dr. David J., (Bonnie), Assoc. Prof., Comp. Ani. & Sp. Species Med., SVM 4700 Hillsborough St., Box 8401; 2112 Yorkgate Dr., 27612	829-4281	781-9458
Dhillon, Dr. Sukhraj S., (Rajvinder), Res. Scientist, Bot. 3108 Gardner, Box 7612; 216 Gordon St., Cary 27511	3403	467-4856
Dial, Dr. Gary D., (Ortrude), Asst. Prof., Food Ani. & Equ. Med., SVM 4700 Hillsborough St., Box 8401; Trinity Cir., 27607	829-4200	851-7930

Name, Title, Department and Address	Office Phone	Resid. Phone
DiBucci, Cheryl A., Asst. Dir., Oper., Housing & Resid. Life 206 Harris, Box 7315; 4337 Avent Ferry Rd., 27606	2419	
Dick, Vita M., Budg. Clk., Res. Admin. Lower Level Leazar, Box 7003; 5337 Olive Rd., 27606	2444	851-6912
Dickens, Dr. James W., (Christine), Prof., USDA, Bio. & Agri'l. Engr. 126 Weaver, Box 7625; 5312 Woodsdale Rd., 27606	3101	851-3834
Dickens, Dr. Randolph C., (Lazelle W.), Instr. Emer., Math. 211 Harrelson; 4421 Pamlico Dr., 27609	3320	787-0268
Dickerson, Susan R., (John E.), Data Entry Oper., Dairy Rec. Proc. Ctr. Leazar, Box 7623; Rt. 2, Box 326-O, Wake Forest 27587	2075	266-4918
Dickerson, Willard A., (Susan), Res. Entomologist, USDA-ARS Boll Weevil Eradication Res. 4116 Reedy Creek Rd., 27607; 3605 Edencroft Dr., 27612	3560	781-1834
Dickey, Dr. David A., (Barbara), Assoc. Prof., Stat. 614C Cox, Box 8203; 6805 Woodmere Dr., 27612	2532	846-0614
Diehl, Dr. Sherra E., Assoc. Prof., Elec. & Comp. Engr. 427 Daniels; 219 Woodridge, Durham 27707		493-4528
Dietz, Dr. E. Jacquelin, (Richard Morris), Assoc. Prof., Stat. 503-A Cox, Box 8203; 6024 Brass Lantern Ct., 27606	2584	839-8619
Difatta, Peter J., Dir., Biomed. Comm. Ctr., SVM 4700 Hillsborough St., Box 8401; 1436 Acadia St., Durham 27701	829-4206	688-7470
Digh, R. Eddie, Patrol Off., Public Safety Field House, Box 7220	3206	
Dillard, A. Wayne, (Jeannie), Res. Tech., USDA, Gen. 3513 Gardner, Box 7614; 5212 Melbourne Rd., 27607	3805, 3560	851-6744
Dillard, Dr. Emmett U., (Della), Assoc. Prof. Emer. 1110 Dogwood Ln., 27607		782-3594
Dillman, Nancy P., (David), Acct. Clk., Fund Acct. 213 Admn. Serv. Ctr., Box 7203; 5212 Cherrywood Ct., 27609	3587	876-4179
Dillman, Dr. Richard C., (Carol), Prof., Microb., Path. & Parasit., SVM 4700 Hillsborough St., Box 8401; 3009 Old Orchard Rd., 27607	829-4257	781-3913
Dillon, Dr. Linda S., (David), Assoc. Prof., Occup. Educ. 502-J Poe, Box 7801; 404 Harding St., 27604	2234	821-0249
DiPaola, Dr. Joseph M., (Maryann), Assoc. Prof., Crop Sci. 1126 Williams, Box 7620; 112 Meadows Cir., Knightdale 27545	2657	266-6855
Dismukes, Sylvia B., Acct. Clk., Univ. Dining 3805 Beryl Rd., Box 7307; 615 Springview Tr., Garner 27529	7012	772-3368
Dixon, Dr. Deborah A., (David), Res. Tech., Food Ani. & Equ. Med., SVM 4700 Hillsborough St., Box 8401; 311 Trappers' Sack Rd., Cary 27511	829-4200	467-3844
Dixon, Eugene T., Stock Clk., Central Stores Sullivan Dr., Box 7225	2230	
Dixon, Dr. George R., (Claudia), Assoc. Dir., Admis. 112 Peele, Box 7103; 4505 Chesborough Rd., 27612	2437	781-1531
Dixon, James, (Maggie Mae), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 900 Buffaloe Rd., Clayton 27520	3323	553-5295
Dixon, Lyman B., Spec-in-Charge Emer., Ext. 4-H & Youth Dev. 1612 Franklin Rd.		851-2502
Dixon, Mary E., Stock Clk., Phys. Educ. 1214 Carmichael, Box 8111; 717 Darby St., 27610	3508	834-9973
Dixon, Penny H., (Kenneth), Acct. Spec., Agri'l. Res. Admin. 108 Patterson, Box 7601; Rt. 1, Box 207, Benson 27504	2714	894-4414
Dixon, Veronica M., Wordprocessor, Inst'l. Res. 202 Peele, Box 7002; 717 Darby St., 27610	2776	834-9973
Dixon, Virgie H., (G. Dean), Acct. Clk., Dairy Rec. Proc. Ctr. Leazar, Box 7623; 2321 Millbank St., 27610	7828	834-2849
Doak, Dr. George O., Prof. Emer. Chem. 736 Dabney, Box 8204; Box 853, Chapel Hill 27514	2948	942-4576
Dobbins, Grover C., (Mary), Dist. Ext. Chm., Agri'l. Ext. Serv. 3304 Redbud Ln., 27607		787-6346
Dobbins, Regina A., Acct. Clk., Acct. Pay. 213 Admn. Serv. Ctr., Box 7204	3367	

Name, Title, Department and Address	Office Phone	Resid. Phone
Dobrogosz, Dr. Walter J., (Donna), Prof., Microb. 4617 Gardner, Box 7615; 4002 Converse Dr., 27609	7652	787-0264
Dobson, Samuel H., (Frances), Ext. Prof. Emer., Crop Sci. 2128 Buckingham Rd., 27607		787-7925
Dodson, Dr. John D., Spec., Agri'l. Ext. 110 Brooks Ave., Box 7602; 100 York St., Cary 27511	2983	467-2709
Dodson, Sharon D., (Donald G.), RN, Fam. Nurse Prac., Health Serv. Clark Inf., Box 7304; Rt. 1, Box 76K, Morrisville 27560	2564	467-0081
Doerr, Dr. Phillip D., (Carolyn), Prof., Zool. 2104 Gardner, Box 7617; 3601 Penny Ct., 27606	2741	834-9353
Doggett, Dr. Wesley O., (Leonor), Prof., Physics 312 Cox, Box 8209; 2452 Oxford Rd., 27608	2426, 2505	828-4029
Dolby, JoAnne, Cash., Fin. & Bus. 2 Peele, Box 7213	2988	
Dolce, Dr. Carl J., (Nancy), Prof. & Dean, School of Educ. 208 Poe, Box 7801; 801 Macon Pl., 27609	2231	782-0679
Donaghy, Sandra B., (Joseph), Sr. Stat., Stat. 509-G Cox, Box 8203; 103 Heritage Ct., Cary 27511	2584	469-0941
Donahue, Darrell W., (Cathy), Inst., Bio. & Agri'l. Engr. 179 Weaver, Box 7625; 503 Dundalk Way, Cary 27511	3121	362-1225
Donaldson, R. Alan, (Betty), Assoc. Prof., Text. Mgmt. & Tech., & Design 306-D Nelson, Box 8301; 6620 Winding Tr., 27612	3442	848-0530
Donaldson, Dr. William E., (Jody), WNR Prof., Poul. Sci. 212 Scott, Box 7608; 4401 Laurel Hills Rd., 27612	2623	787-1690
Dones, Lula S., (Fred), Hskp. Supv., SSS SSS, Box 7224; 2313 Sanderford Rd., 27610	2161	839-8771
Donnelly, Marjorie M., Ext. Prof. Emer., Agri'l. Ext., Home Ec. 2404 Stafford Ave., 27607	2770	832-3871
Doolittle, Jesse S., (Grace), Prof. Emer., Mech. & Aero. Engr. 3171 Broughton, Box 7910; 2 Springmoor Dr., 27609	2365	848-7002
Dorff, Dr. Robert H., (Connie H.), Assoc. Prof., Pol. Sci. & Pub. Admin. 221A Winston, Box 8102; 111 Bristol Dr., Chapel Hill 27514	2481	929-9926
Dorsey, Alice W., Sec., Micro., Path., & Parasit., SVM 4700 Hillsborough St., Box 8401	829-4250	
Dorsey, William E., (Janet), Engr. Res. Tech., Ani. Sci. 1150 Grinnells, Box 7626; 217 W. Durham Rd., Cary 27511	2019	467-9877
Doster, Dr. Joseph M., (Ellen), Asst. Prof., Nuc. Engr. 2107 Burlington, Box 7909; 1104 Toppe Ridge Ct., 27609	3658	848-0445
Dougherty, Dr. William G., Asst. Prof., Plant Path. 2610 Gardner, Box 7616; 1633 Crump Rd., 27606	2735	851-2548
Douglas, Dr. Robert A., (Phyllis Bradbury), Prof., Civil Engr. 400 Mann, Box 7908; 2610 Vanderbilt Ave., 27607	2331	834-9217
Douglass, David A., Jr., (Margaret), Elect., Phys. Plant Armory, Box 7219; 2704 Evers Dr., 27610	3080	843-8162
Dove, Rachel P., (Lee), Data Entry Oper., Admin. Comp. Serv., Data Proc. ... 12 Peele, Box 7208; 708 Wakeland Dr., Garner 27529	2459	772-4568
Dover, Harold A., Steakhouse Mgr., Univ. Dining Dining Hall, Box 7307; 207 Park Ave., 27605	3963	834-6436
Dow, Dr. Thomas A., (Kathy), Prof., Mech. & Aero. Engr. 4219 Broughton, Box 7910; 5820 Winthrop Dr., 27612	3024	787-4596
Dowd, Delores J., (James C.), Data Entry Oper., Dairy Rec. Proc. Ctr. Leazar, Box 7623; 526 Lansing St., 27610	2075	
Downing, Anne M., (Mort), Ben. Counselor, Admn Serv. Ctr. Leazar, Lower Level, Box 7215; 2512 Clark Ave., 27607	2151	821-7638
Downs, Judith T., (Alan), Libr. Asst., Circ., Libr. 1212 Library, Box 7111; 702 S Kimbrough St., 27608	3364	834-6756
Downs, Lee, TV Engr., Univ. Stud. 2324 Library, Box 7111; 1225 Junction Rd., Durham 27704	3895	682-5300
Downs, Dr. Murray S., (Virginia), Assoc. Prov. & Prof., Hist. 1 Holladay, Box 7101; 2014 Myron Dr., 27607	2194	787-5247
Downs, Dr. Robert J., (Joy), Dir., Phyt. & Prof., Bot. & Hort. Sci., Phyt. 2003 Gardner, Box 7618; 3605 Octavia St., 27606	2778, 2779	851-1283

Name, Title, Department and Address	Office Phone	Resid. Phone
Downs, Virginia C., (Murray), Asst. Prof., Engl. 280 Tompkins, Box 8105; 2014 Myron Dr., 27607	3863	787-5247
Dowtin, Eloise M., Nurse, Health Serv. Clark Inf., Box 7304; 411 Rose Ln., 27610	2564	834-6098
Doyle, James W., (Pam), Fed. Prop. Scnr., SVM 4700 Hillsborough St., Box 8401; 4205 Lake Boone Tr., 27607	829-4200	781-1286
Doyle, Mary S., (Howard), Libr. Asst., Reserve Rm., Libr. 1320 Library, Box 7111; Rt. 4, Box 340, Zebulon 27597	2597	269-6312
Drabick, Dr. Lawrence W., (Janice), Prof. Emer., Soc. & Anth. 342 1911 Bldg., Box 8107	2702	
Drabick, Matt L., (Nedda), Teach. Tech., Speech-Comm. 2316-B Library, Box 8104; 5406 Tralee Pl., 27609	3303	846-0980
Drayton, Michael A., (Mattie), Laborer, Phys. Plant Sullivan Dr., Box 7219; 1102 Holmes St., 27601	3408	821-5164
Drehmel, Claire A., (Dennis), Vis. Lect., For. Lang. 304 Harrelson, Box 8106; 1131 Sturvidant Dr., Cary 27511	3297	467-6642
Drewes, Dr. Donald W., (Betty), Prof., Psy. 640-C Poe, Box 7801; 3205 Kenly Ct., 27607	2251	787-3319
Driggers, L. Bynum, (Kay), Ext. Prof., Bio. & Agri'l. Engr. 209 Weaver, Box 7625; 2213 Nancy Ann Dr., 27607	2675	787-7633
Dring, Neal R., (Peggy), Whse. Mgr., Phys. Plant 20 Riddick Stad., Box 7219; P.O. Box 425, Townsville 27584	3256	492-4889
Driscoll, Susanne, Res. Tech., Anat., Physiol. Sci., & Radiol., SVM 4700 Hillsborough St., Box 8401	829-4200	
Driver, Ava H., (Earnest), Sec., Dairy Rec. Proc. Ctr. Leazar, Box 7623; Rt. 1, Box 992, Knightdale 27545	7828	266-0284
Driver, Randy C., Prnt. Equip. Oper., Univ. Graphics Sullivan Dr., Box 7226; Rt. 1, Box 35-A, Middlesex 27557	2131	235-3745
DuBay, Dr. Denis T., (Connie Fitzgerald), Air Qual. Res. Prog., Bot. 3908 Inwood Rd., Box 7632; 1556 Seabrook Ave., Cary 27511	3575	467-9742
Dublin, Tyson, (Rhoda), Agri'l. Res. Asst., For. 1019 Biltmore, Box 8002; 813 Grantland Dr., 27610	3168	833-3501
DuBois, Susan M., Comp. Programmer, Admn. Comp. Serv. B21 Hillsborough Bldg., Box 7209; 3500 Palm Ct., Apt. 302, 27607	2794	787-9263
DuBose, Maj. Harry M., (Gayle), Adj., Mil. Sci. 154 Coliseum, Box 7309; 1538 Dirkson Ct., Cary 27511	2428	467-4268
Duckett, Sharon L., Pers. Asst., Human Resou. Admn. Serv. Ctr., Box 7210; 2002 Tryon Rd., 27603	7929	832-8517
Duckett, Dr. Wendy M., Asst. Prof., Food Ani. & Equ. Med., SVM 4700 Hillsborough St., Box 8401; 5331-C Wayne St., 27606	829-4200	859-1941
Dudley, C. Willard, Engr. Res. Tech., Wood & Paper Sci. Hodges Lab., Box 8005; Rt. 1, Box 135B, Angier 27501	2881	639-2712
Dudley, Kay J., Libr. Technical Asst., Monographic Cat. 1121 Library, Box 7111; 1508 Stovall Dr., 27606	2603	828-1467
Duell, Shelia L., Clk.-Typ., Chem. 108 Dabney, Box 8204; 3209 Snowberry Dr., 27610	2546	828-9623
Dugger, Barbara J., Sec., Vet. Equine Res. Ctr. P. O. Drawer 211, Southern Pines 28387	692-8773	
Duke, Dot P., (Sonny), Clk.-Typ., Plant Path. 1300 Gardner, Box 7616; 5515 Windmill Ln., 27606	3619	362-9222
Duncan, Dr. Dawn E., Resid., Path., SVM 4700 Hillsborough St., Box 8401	829-4200	
Duncan, Dr. Harry E., (Carmela), Spec.-In-Charge & Prof., Plant Path. Ext. 1410 Gardner, Box 7616; 201 Chatterson Dr., 27609	2711	847-4526
Dunkle, Kenneth T., (Helen), Const. & Renov. Tech., Phys. Plant 4-C Morris, Box 7219; P.O. Box 32421, 27627	2184	481-1269
Dunlap, Stephanie B., RN, Health Serv. Clark Inf., Box 7304; 113 Merlin Dr., 27545	2562	255-0302
Dunleavy, William E., (Nola), Elec. Tech., Civil Engr. 102 Mann, Box 7908; 2612 Vanderbilt Ave., 27607	2331	821-0520
Dunn, Barry L., Hskp. Asst., Phys. Plant. Park Shops, Box 7219; 446 Dorothea Dr., 27610	3323	832-7246

Name, Title, Department and Address	Office Phone	Resid. Phone
Dunn, Beatrice Hskp. Asst., Phys. Plant Park Shops, Box 7219; 607 Candor Ln., 27601	3323	833-4320
Dunn, Betty Z., (Clyde), Admn. Asst., Campus Plan. & Const. 219 Oberlin Rd, Box 7216; 2527 St. Mary's St., 27609	2121	787-5788
Dunn, Billy R., Hskp. Supv., Phys. Plant Park Shops, Box 7219; 2820 Buffoloe, Clayton 27520	3323	
Dunn, Clarence D., Hskp. Supv., Phys. Plant Park Shops, Box 7219; Rt. 5, Box 178-E, 27604	3323	266-4543
Dunn, Ernest, Floor Maint. Asst., Phys. Plant Park Shops, Box 7219; 813 Payton St., 27610	3323	
Dunn, Evelyn D., Hskp. Asst., Phys. Plant Park Shops, Box 7219; P.O. Box 612, Ranch Rd., Clayton 27520	3323	553-5959
Dunn, Herbert, Hskp. Asst., Phys. Plant Park Shops, Box 7219	3323	
Dunn, James L., Hskp. Asst., Phys. Plant Park Shops, Box 7219	3323	
Dunn, Jeanette L., Hskp. Supv., Phys. Plant Park Shops, Box 7219; 446 Dorothea Dr., 27601	3323	833-7246
Dunn, Johnnie J., Hskp. Supv., Phys. Plant Park Shops, Box 7219	3323	
Dunn, Dr. Joseph C., (Margaret), Prof., Math. 333 Harrelson, Box 8205; 405 Fairgreen Way, Cary 27511	7891	467-4934
Dunn, Joyce D., (James), Admn. Sec., Chem. 208 Dabney, Box 8204; Rt. 5, Box 180, 27604	2545	266-1720
Dunn, Kenneth D., Gen. Utility Wkr., Phys. Plant Sullivan Dr., Box 7219; Rt. 2, Box 241A, Middlesex 27557	3408	478-3044
Dunn, Mazie B., Sec., Engr. Coop. Educ. Prog. 115 Page, Box 7904; 612 Chamberlain St., 27607	2300, 7444	833-1493
Dunn, Patrick H., Hskp. Asst., Phys. Plant. Park Shops, Box 7219	3323	
Dunn, Queenie E., Hskp. Asst., Alumni Rel. Alumni Bldg. Box 7503; 3318 Bell Dr., 27610	3375	833-6361
Dunn, Ruby M., (John B.), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 817 Grantland Dr., 27601	3323	828-1066
Dunn, Sandra C., (Lawrence), Librn. 1121 Library, Box 7111; 2205 Evers Dr., 27610	2603	821-4835
Dunn, Theodocia G., Hskp. Asst., Phys. Plant Park Shops, Box 7219; G-11 Washington Terr., 27610	3323	834-3084
Dunn, Ulysses, Jr., Stock Clk., Phys. Educ. 1217E Carmichael, Box 8111; 2520 Fitzgerald Dr., 27610	3508	834-0182
Dunning, John A., (Iki), Res. Assoc., USDA-Bot. 2005 Phyt., Box 7618; 1012 Harvey St., 27608	2778	828-8867
Dunphy, Dr. E. James, (Judy), Prof., Ext. Crop Sci. 2408 Williams, Box 7620; 1329 Swallow Dr., 27606	2246	851-6333
Dunston, Berry, Jr., Bldg. Serv. Supt., Phys. Plant 4 Park Shops, Box 7219; 1221 Downing Rd., 27610	3323	755-1791
Dunston, Clara M., Gen. Utility Wkr., Phys. Plant Sullivan Dr., Box 7219; 410 Cutler St., 27603	3408	
Dunston, Dexter, (Mattie), Grounds Wkr., Phys. Plant. Sullivan Dr., Box 7219; 1301 E. Jones St., 27610	3408	821-5644
Dunston, F. Elsie, Hskpr., Stu. Aff. Univ. Stu. Ctr., Box 7306; 1301 E. Jones St., 27603	3340	821-5644
Dunston, Henry A., (Betty), Vehicle Oper., Phys. Plant Recla. Ctr., Box 7219; Rt. 2, Twin Acres, Clayton	3800	553-7677
Dunston, Huston J., (Lula), Stock Supv., Central Stores Sullivan Dr., Box 7225; 5025 Roayal Acres Rd., 27610	3795	779-4153
Dunston, James, (Martha), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 1100 Beverly Dr., 27610	3323	834-8903
Dunston, Jimmie G., (Peggie), Painter, Phys. Plant Park Shops, Box 7219; Rt. 2, Box 603, Franklinton 27525	3323	496-6960
Dunston, Katie, Hskp. Asst., Phys. Plant Park Shops, Box 7219; 719 S. Boylan Ave., 27603	3323	828-2893
Dunston, Larry C., Gen. Utility Wkr., Phys. Plant Sullivan Dr., Box 7219; 2330 Slate Top Rd., Clayton 27520	3408	553-4649

Name, Title, Department and Address	Office Phone	Resid. Phone
Dunston, Roy L., Laborer, Phys. Plant Sullivan Dr., Box 7219; Rt. 3, Box 78A, Zebulon 27597	3408	269-9145
Dunston, Stanley M., Res. Tech., Comp. Ani. & Sp. Species Med., SVM	829-4328	834-5182
4700 Hillsborough St., Box 8401; 4117 Holly Spring Rd., 27606	2807	834-1543
Dunston, Theardis, Asst. Equip. Mgr., Athl. Reynolds Coliseum, Box 8501; 113 N. Carver St., 27610	3080	
Dunston, Vernita W., (Stanley), HVAC Apprentice, Phys. Plant Armory, Box 7219; 4117 Holly Springs Rd., 27606	2748	934-6622
Dupree, Herbert E., Jr., Agri'l. Res. Tech., Ent. 4317 Gardner, Box 7613; 19 Berkshire Pl., Smithfield 27577	2188	
Dupree, Marlene P., (Chester Alan), Acct. Clk., Phys. Plant. 209E Morris; 6220 Krandon Dr., 27603	3500	772-5325
Dupree, Rachel F., (James), Admn. Sec., NCSFNC, For. 1025 Biltmore, Box 8002; 803 Clifton St., Garner 27529	3080	872-7731
Dupree, Timothy A., Elect., Phys. Plant Armory Shop, Box 7219; 3902 Butler, 27604	2131	772-4136
Dupree, W. Wayne, Litho Press Oper., Univ. Graphics Sullivan Dr., Box 7226; 1005 Turner Farms Rd., Garner 27529	2710	362-0516
Dupree, Wanda J., (Steve), Admn. Sec., Agri. & Life Sci. 120 Patterson, Box 7601; Rt. 3, Box 335-1, Apex 27502	2153	
Durham, Dewey B., Jr., Asst. Dir., Contr. & Grant Leazar, Lower Level, Box 7214	3353	782-9655
Durant, Dr. Jack D., (Judy), Prof. & Assoc. Head, Engl. 131-G Tompkins, Box 8105; 3001 Old Orchard Rd., 27607	3881	787-6652
Dutton, Dr. John C., (Marilyn), Assoc. Prof., Ec. & Bus. 207-B Hillsborough Bldg., Box 8110; 1508 Canterbury Rd., 27608	2738	469-1932
Dvorak, William S., (Laurie), Dir., CAMCORE Coop., For. Res. Annex West, Box 8007; 111 Abbots Glen Ct., Cary 27511	829-4202	362-1114
Dykstra, Dr. Michael J., Elec. Micro. Dir., Anat., Physiol. Sci. & Radiol., SVM		
4700 Hillsborough St., Box 8401; Box 108, Rt. 1, New Hill 27562		

E

Eaddy, Dr. Donald W., (Lola), Adj. Assoc. Prof., Soil Sci. Agronomic Div., NCDA	733-2655	851-3492
Blue Ridge Rd. Ctr., 27611; 648 S. Lakeside Dr., 27606	2771	851-3492
Eaddy, Lola L., (Donald), Sec., Ani. Sci. 102 Polk, Box 7621; 648 S. Lakeside Dr., 27606	2572	269-5669
Eaddy, Wilhemenia, (Freeman), Transcript Clk., Reg. & Rec. 100 Harris, Box 7313; 200 E. Barbee St., Zebulon 27597	3963	
Eady, Bernace L., Food Serv. Supv., Univ. Dining Dining Hall, Box 7307; 2411 Bedford Ave., 27607		
Eaker, Thomas A., (Monique), Agri'l. Res. Tech., Hort. Sci. 2016 Fanning Bridge Rd., Fletcher, 28732-9628		704-684-3562 704-684-5566
65 Hooper Valley Estates, Fletcher 28732	3323	
Eakes, Steve, Painter, Phys. Plant Park Shops, Box 7219; P.O. Box 581, Coats 27521	2358	781-4701
Eargle, Fred L., (Glenna), Engr. Ext. Spec., IES 215-E Page, Box 7902; 2816 Wycliff Rd., 27607	2188	834-4544
Early, Mildred, Payr. Clk., Phys. Plant 209-H Morris, Box 7219; 608 Dennis Ave., 27604	2735	362-4247
Earnhardt, Elizabeth B., (Robert S.), Bkpr., Plant Path. 2518 Gardner, Box 7616; 7908 Netherlands Dr., 27606	3346	365-6348
Earp, John B., (Dianne), Agri'l. Res. Tech., Hort. Sci. 70 Kilgore, Box 7609; Rt. 1, Box 398, Wendell 27591	2108	365-7654
Earp, Larry S., Engr., Athl. Reynolds Coliseum, Box 8501; 3981 Buffalo, Archers Lodge 27520	2184	365-7387
Earp, Paul W., Maint. Mech., Phys. Plant Heating Plant, Box 7219; Rt. 1, Box 116, Wendell 27591		

Name, Title, Department and Address	Office Phone	Resid. Phone
Easley, Dr. James E., Jr., (Wanda), Prof., Ec. & Bus. 311-A Hillsborough Bldg., Box 8110; 1015 Brooks Ave., 27607	2885	833-6689
Easley, John B., Assoc. Prof., Engl. G105-C Tompkins, Box 8105; 2815 Van Dyke Ave., 27607	3854	828-6125
Eason, Billy R., (Gracie), Painter, Phys. Plant Park Shops, Box 7219; 506 Park Dr., Clayton 27520	3323	553-6977
Eason, Bonita E., Typ., Stat. 604 Cox, Box 8203; 4525 Hamptonshire Dr., 27612	2535	782-0863
Easter, William T., (Mary), Assoc. Dept. Head, Elec. & Comp. Engr. 232 Daniels, Box 7911; 226 Lake Dr., Cary 27511	2336	467-9989
Easterling, W. Don, Men's & Women's Swim. Coach, Athl. Case Athl. Ctr., Box 8501; 7925 Netherlands Dr., 27606	2849	362-6767
Eatmon, Harold M., Hskp. Asst., Phys. Plant Park Shops, Box 7219; Box 101, Rt. 1, Morrisville 27560	3323	362-6884
Eaton, Donna J., (Jay), Acct. Clk., Crop Sci. Ext. 2125B Williams, Box 7620; Rt. 1, Box 4710, Willow Springs 27592	2653	639-2457
Eberhardt, Dr. Allen C., (Mary), Assoc. Prof., Mech. & Aero. Engr. 2412 Broughton, Box 7910; 7408 Wingfoot Dr., 27612	3024	848-1668
Ebisuzaki, Dr. Yukiko, Assoc. Prof., Chem. 814 Dabney, Box 8204; 3142-B Avent Ferry Rd., 27606	2996	
Echandi, Dr. Eddie, (Mildred), Prof., Plant Path. 2506 Gardner, Box 7616; 4908 North Hills Dr., 27609	2735	787-6960
Echerd, Charles S., (Cynthia), Grnhse. Wkr., Phyt./SALS 2003 Gardner, Box 7618; 6224 Rock Quarry Rd., 27610	2778	779-4812
Eckels, Dr. Arthur R., (Majorie), Prof. Emer., Elec. & Comp. Engr. Box 7911; 1417 Dellwood Dr., 27607		787-5552
Eckerd, Monique S., Agri'l. Res. Tech., Ani. Sci. 3720 Lake Wheeler Rd., Box 7621; Rt. 3, Box 333, 27603	2674	772-5429
Eckerlin, Dr. Herbert M., (Juliana), Assoc. Prof., Mech. & Aero. Engr. 3179-B Broughton, Box 7910; 4313 Azalea Dr., 27612	2365	787-5682
Edens, Dr. Frank W., (Mary), Prof., Poul. Sci. Dearstyne Avian Res. Ctr., Box 7608; 326 Northclift Dr., 27609	2649	847-4190
Edgerton, Stephen C., Media Tech., Biomed. Comm. Ctr. SVM 4700 Hillsborough St., Box 8401	829-4206	
Edmond, Rita A., (John), Sec., Ec. & Bus. 220 Patterson, Box 8109; 1228 D Hamilton Ct., Cary 27511	2609	469-8768
Edwards, Andrew H., Boiler Opr., Phys. Plant Heating Plant, Box 7219; Rt. 1, Box 643, Spring Hope 27882	2184	
Edwards, Adrienne L., Res. Tech., Hort. Sci. 201 Kilgore, Box 7609; 1101 Roosevelt Dr., Chapel Hill 27514	3167	967-3162
Edwards, Clara B., (Tommie), Sec., For., Acid Depos. Prog. 1509 Varsity Dr., Box 7632; 4900 Dan David Dr., 27606	3311	851-5070
Edwards, E. Susan, Aux. Functions Coord., Public Safety Field House, Box 7220	2156	
Edwards, Ellis C., Agri'l. Res. Tech., Soil Sci. 3410 Williams, Box 7619; 4704 Randolph Ct., 27606	2600	755-0729
Edwards, Ernest L., Stock Clk., SSS SSS, Box 7224; 2313 Sanderford Rd., 27611	2161	
Edwards, Howard E., Jr., (Phyllis), Litho. Pressman, Agri'l. Comm. 23 Ricks, Box 7603; Rt. 3, Box 12, Wendell 27591	2791	365-7467
Edwards, Dr. John A., Prof., Mech. & Aero. Engr. & Dir., Applied Energy Res. Lab. 3222 Broughton, Box 7910; 1103 Imperial Rd., Cary 27511	2365	467-7223
Edwards, Linda B., (Charles D.), Admn. Sec., Crop Sci. Ext. 2214 Williams, Box 7620; 4812 Smith Dr., 27606	2653	851-4347
Edwards, Marjorie W., (Joseph), Admn. Sec., Adult & Comm. Coll. Educ. ... 310 Poe, Box 7801; 4511-H Edwards Mill Rd., 27612	3590	787-9133
Edwards, Dr. Marlin D., Res. Assoc., Gen. 3635 Gardner, Box 7614; 810 Chamberlin St.	2289	832-0208
Edwards, Michael C., (Laura), Int. Auditor, Int. Audit B Holladay, Box 7202; 4505 Jacqueline Lane, 27604	3289	850-9233
Edwards, Reese, (Cleo), Radio-TV Ed., Agri'l. Comm. 317 Ricks, Box 7603; 1012 DeBoy St., 27606	3173	851-1712

Name, Title, Department and Address	Office Phone	Resid. Phone
Edwards, Robert L., (Jane), Supv., Tech. Serv. & Sr. Engr. Ext. Spec., IES 2356	787-2633	
211 Page, Box 7902; 2613 Glen Burnie Dr., 27607		
Edwards, Dr. Stephen T., (Anna), Res. Assoc., Elec. & Comp. Engr. 2878		
112 Daniels, Box 7911; 2334 McCullen Cir., 27606		
Edwards, Sylvia G., (Harold), Sec., Agri'l. Ext. 3467	851-4144	
302 Ricks, Box 7602; 800 Valerie Dr., 27606		
Edwards, Tommie D., Agri'l. Res. Tech., Ent. 3404, 2832	851-5070	
3321 Gardner, Box 7613; 4900 Dan David Dr., 27606		
Edwards, William H., Res. Tech., Poul. Sci. 2623	779-7216	
228 Scott, Box 7608; 205-F Johnson St., Garner 27529		
Egerton, Douglas P., Mail Clk., Phys. Plant 3974	496-4720	
Leazar, Box 7219; Rt. 5, Box 95, Louisburg 27549		
Eickhoff, Dr. William D., (Wanda), Ext. Assoc. Prof., Ec. & Bus. 2256	848-6899	
209-B Patterson, Box 8109; 8809 Northview Ct., 27612		
Eischen, Dr. Jeffrey W., Asst. Prof. Mech. & Aero. Engr.		
Box 7910; 105 Boldleaf Court, Cary 27511		
Eisen, Dr. Eugene J., Prof., Ani. Sci. 2769	787-3698	
226 Polk, Box 7621; 308 Northfield Dr., 27609		
Ekwall, John A., (Elizabeth), Lect., Ind. Engr. 3335	782-5279	
343 Riddick, Box 7906; 5105 Whitehall Pl., 27612		
Elcherif, Dr. Yassin S., Vis. Asst. Prof., Elec. & Comp. Engr. 2336	851-4020	
417 Daniels, Box 7911; 5028H Ft. Sumter Rd., 27606		
Eldridge, Lee Ann, Lect., Math. 7241	859-1097	
343 Harrelson, Box 8205; 4117 Kaplan Dr., 27606		
Eling, Dr. Thomas E., Adj. Assoc. Prof., Anat., Physiol. Sci. & Radiol., SVM		
NIEHS, Res. Tri. Pk.; Box 8401		
Elkan, Dr. Gerald H., Prof., Microb. 3945	834-2727	
4521 Gardner, Box 7615; 606 Stacy St., 27607		
Elkerson, Patricia A., (Larry), Hskp. Asst., Phys. Plant 3323	839-1020	
Park Shops, Box 7219; 2123 Dandridge Dr., 27610		
Elleman, Charlotte Ann, (Thomas), Speech. Comm. 3767	782-6685	
222 Winston, Box 8104; 704 Davidson St., 27609		
Elleman, Dr. Thomas S., (Ann), Assoc. Dean, Engr. Res. Progs. 2345	782-6685	
224 Page, Box 7903; 704 Davidson St., 27609		
Elliott, John D., Analyst Programmer, Admn. Comp. Serv. 3541	552-6434	
Leazar, Lower Level., Box 7209; Rt. 1, Box 25, Fuquay-Varina 27526		
Elliott, Karen Lynn Herring, (Neal), Budg. Clk., Stat. 2529	781-1835	
107 Cox, Box 8203; 2403-F Wesvill Ct., 27607		
Elliott, Kristin M., Teller, Credit Union 2686		
2802 Hillsborough St.; Box 8609		
Elliott, Lee T., Lect., Engl. 3854	732-2013	
106 Tompkins, Box 8105; 116 Warner Ln., Hillsborough 27278		
Elliott, Dr. Robert N., (Elizabeth), Assoc. Prof. Emer., Hist. 2485	832-4108	
134 Harrelson, Box 8108; 1007 James Pl., 27605		
Elliott-Stewart, Regina, Acct. Tech., For., Acid Deposit. Prog. 3520		
1509 Varsity Dr., Box 7632; 1328 Londonderry Cir., 27610		
Ellis, Dr. Don E., (Helen), Prof. Emer., Plant Path. 2751	847-7244	
3418 Gardner, Box 7616; 244 Springmoor Dr., 27609		
Ellis, Donna F., Acct. Tech., Contr. & Grants 2153	876-5770	
Leazar, Box 7214; 4948A Pebble Beach Dr., 27604		
Ellis, Howard M., Sr., (Jessie W.), Ext. Prof. Emer., Bio. & Agri'l. Engr.	848-7005	
5 Springmoor Dr., 27609		
Ellis, James D., (Annes), Elect., Phys. Plant 3080	772-7478	
Armory Shop, Box 7219; 507 Buck Branch Dr., Garner 27529		
Ellis, Linda A., Lect., Phys. Educ. 2487, 2488	837-5001	
2025 Carmichael, Box 8111; Rt. 2, Box 7A, Bear Creek 27207		
Ellis, LuAnn, (Boyd), Acct. Clk., Central Stores 2198	846-8814	
Sullivan Dr., Box 7225; 7101-1C Sandy Forks Rd., 27609		
Ellis, Nancy G., (William Perry), Data Entry Oper., Dairy Rec. Proc. Ctr. ... 2075	266-1940	
Leazar, Box 7623; Rt. 1, Box 58, Knightdale 27545		
Ellis, Pamela H., (Doug), Sec., Soc. & Anth. Ext. 2670	779-3709	
236 1911 Bldg., Box 8107; 6005 Oxford Green Dr., Apex 27502		

Name, Title, Department and Address	Office Phone	Resid. Phone
Ellis, Ronald G., Jr., Ext. Benefits Counselor, Agri'l. Ext. Serv. ....2814 114 Ricks, Box 7602; 517 N. East St., Historic Oakwood, 27604	2814	828-3691
Ellis, Ruth, Dir., Payr. & Ben. ....2151 Admn. Ser. Ctr., Box 7215; 1625 St. Mary's St., 27608	2151	834-8634
Ellis, Sue E., Word Processor, Admn. Serv., Engr. Publ. ....2283 8 Page, Box 7901; 119-E Shady Lawn Ct., Garner 27259	2283	772-8579
Ellison, Gerda L., (Charles), Sec., Univ. Dining ....3963 Dining Hall, Box 7307; 608 Brookfield Rd., 27609	3963	848-0113
Ellner, Dr. Stephen P., (Nancy), Asst. Prof., Biomath. & Stat. ....2271 513-G Cox, Box 8203	2271	
Ellovich, Dr. Risa S., Asst. Prof., Soc. & Anth. ....3114 307 1911 Bldg., Box 8107; 1885 Bellwood Dr., 27605	3114	832-0492
Ellwood, Dr. Eric L., (Dorothy), Dean, For. Resou. ....2883 2028H Biltmore, Box 8001; 4505 Pitt St., 27609	2883	787-2895
Ellzey, Kenneth H., T.V. Engr., Agri'l Comm. ....7055 1 Polk, Box 7603; 1013 Gloria, Apt. 3, Durham 27701	7055	
Elmaghraby, Dr. Salah E., (Amina), Dir. & Prof., Oper. Res. ....2350 322-A Riddick, Box 7913; 124 Perquimans Dr., 27609	2350	787-0855
El-Masry, Dr. Nadia A., Asst. Prof., Mat. Engr. ....2970 2156 Burlington, Box 7916; 201 Woods Ream Dr., 27609	2970	847-5954
El-Shiekh, Dr. Aly H. M., (Sue), Prof., Text. Mgmt. & Tech. ....3442 303 Nelson, Box 8301; 2225 Lash Ave., 27607	3442	787-0135
Elson, Dr. Judy, (Joey Robbins), Res. Tech., Bot., Air Quality Res. ....3575 3908 Inwood Rd., Box 7632; 937 Ivy Lane, Cary 27511	3575	467-8245
Elston, Patricia S., Supv., Univ. Dining ....2021 Univ. Stu. Ctr., Box 7307; 423 Dorothea Dr., 27601	2021	
Ely, Dr. John F., (Joyce), Prof., Civil Engr. ....2331 421 Mann, Box 7908; 1014 Canterbury Rd., 27607	2331	787-6628
Emerick, James E., Instru. Mkr., Engr. Res. Serv. Div. ....2834 1136 Burlington, Box 7903; P.O. Box 41, Kipling 27543	2834	552-6365
Emerson, Jean P., (Larry), Acct. Clk., SSS ....2161 SSS, Box 7224; 1805 Dorton Rd., 27607	2161	851-5753
Emerson, Paul D., (Ernestine), Prof. Emer., Text. Engr. & Sci. ....3253 B-34 Nelson, Box 8301; 4512 Pamlico Dr., 27609	3253	787-1885
Emery, Dr. Donald A., (Judith), Prof. & Teach. Coord., Crop Sci. ....3666 2210 Williams, Box 7620; 5100 Avent Ferry Rd., 27606	3666	851-4808
Emigh, Dr. Ted H., Assoc. Prof., Gen. & Stat. ....2292 3536 Gardner, Box 7614; 7325 Old Hundred Rd., 27612	2292	848-8384
Emory, Frances M., (Earl), Admn. Sec., Soc. & Anth. ....3180 301 1911 Bldg., Box 8107; 1208 Duplin Rd., 27607	3180	787-5519
Emory, Frank E., (Athalene), Asst. Dir. & Spec., Urb. Aff. & Con. Educ. & Professional Dev. ....2261 223 McKimmon, Box 7401; P.O. Box 4095, Wilson 27893	2261	243-5471
Engel, Dr. Elliot D., Assoc. Prof., Engl. ....3863 285 Tompkins, Box 8105; 2700 Kingsley Rd., 27612	3863	787-9108
Epps, Lena V., Sec., Crop Sci. ....3267 4114 Williams, Box 7620; 3045 Wedgedale Dr., 27703	3267	596-1876
Erchul, Dr. William P., (Ann Schulte), Asst. Prof., Psy. ....2253 628-A Poe, Box 7801; 5908 Williamsburg Way, Durham 27713	2253	544-4090
Erickson, Dr. Edward W., (Ann), Prof., Ec. & Bus. ....3893 220 Hillsborough Bldg., Box 8110; 221 W. Park Dr., 27605	3893	828-4572
Esbenshade, Dr. Kenneth L., (Carolyn), Assoc. Prof., Ani. Sci. ....2566 203 Polk, Box 7621; 1001 Athens Dr., 27606	2566	851-8202
Esbenshade, Dr. Phillip R., (Trudy), Res. Tech., Gen. ....2287 2523 Gardner, Box 7614; 605 N. East St., 27604	2287	821-7423
Esposito, Sam D., (Noreen), Baseball Coach, Athl. ....3612 Case Athl. Ctr., Box 8501; 2105 Tyson St., 27612	3612	
Estes, Dr. Edmund A., (Bonnie), Assoc. Prof., Ec. & Bus. ....2605 14 Patterson, Box 8109; 313 Merwin Rd., 27606	2605	851-6623
Ethridge, Ann S., Typ., Biomath. ....2271 513 Cox, Box 8203; 7701 Healthfield Dr., 27615	2271	846-0507
Etzel, Dr. Howard W., (Martha), Assoc. Dean for Res. & Vis. Prof., Res. Admn., Elec. Engr. ....7199 1 Holladay, Box 7003; 406 Annandale Dr., Cary 27511	7199	469-2216

Name, Title, Department and Address	Office Phone	Resid. Phone
Evangelista, Delores J., Clk.-Typ., Math. & Sci. Educ., Res. & Dev. Ctr.	2238	269-5043
326 Poe, Box 7801; 314 S. Arendell Ave., Zebulon 27597		
Evans, Corena H., (Theodore), Med. Supply Tech., Vet. Teach. Hosp., SVM	829-4200	755-1383
4700 Hillsborough St., Box 8401; Rt. 6 Box 342, 27612		
Evans, Donald H., Const. & Renov. Design Tech., Campus Plan. & Const.	2121	494-7979
219 Oberlin Rd., Box 7216; Box 114, Franklinton 27525		
Evans, Frederick, Laborer, Phys. Plant	3408	828-1665
Sullivan Dr., Box 7219; 133 Tarboro St., 27601		
Evans, Jackie F., (Hugh), Sec., For.	3168	851-0599
1019 Biltmore, Box 8002; 105 Baybrook, Cary 27511		
Evans, Dr. James B., (Evelyn), Prof. Emer., Microb.	704-264-3425	
110 Edgewood Dr., Boone 28607		
Evans, James (Jamie) L., Jr., Sys. Mgr., Elec. & Comp. Engr.	2336	266-6730
302 Daniels, Box 7911; 201 Gower Circle, Knightdale, 27545		
Evans, Linda D., (Jerry), Sec., Stu. Aff.	2427	779-4930
145 Reynolds Coliseum, Box 7308; 609 Maple Ln., 27603		
Evans, Dr. Michael J., (Barbara), Prof. & Dir. Undergrad. Prog., Math.	2382	782-5554
202 Harrelson, Box 8205; 1001 Collins Dr., 27609		
Evans, Nancy K., Sec., Biomath	2271	833-1568
513D Cox, Box 8203; 2472 Wade Ave., 27607		
Evans, Richard C., (Norma), Lab. Mech., Phyt.	2778	832-2669
2003 Gardner, Box 7618; 3712 Greenleaf St., 27606		
Evans, Robert O., (Rhonda), Ext. Spec., Bio. & Agri'l. Engr.	2675	847-7646
208 Weaver, Box 7625; 8801 Mansfield Dr., 27612		
Evans, Thomas W., (Huong), Asst. Prof., Phys. Educ.	2487	782-6088
2019 Carmichael, Box 8111; 5909 Wintergreen Dr., 27609		
Everett, Keith M., Res. Tech., Gen.	2289	481-1003
3530 Gardner, Box 7614; 114 Urban Dr., Cary 27511		
Everette, Annie L., Hskp. Asst., Phys. Plant	3323	
Park Shops, Box 7219		
Everhart, Lynn M., Asst. Supv., Stock Control, SSS	3117	878-8825
SSS, Box 7224; 3031-J Timberlake Dr., 27604		
Exley, Hylah L., (Louis), Acct. Tech., Agri'l Ext. Admin.	3158	772-5062
120 Patterson, Box 7601; 102 York Ct., Garner 27529		
Exum, Dr. Herbert A., Assoc. Prof. & Assoc. Dean, Res. & Grad. Stud., Dean's Off., Sch. of Educ.	2231	848-9087
208 Poe, Box 7801		
Eycke, Carl O., (Mary Lou), Dir., Fin. Aid	2421	833-0061
213 Peele, Box 7302; 212 Groveland Ave., 27605		

F

Fabrizio, Malcolm R., (Kitty), Maint. Mech.	2122	735-1131
Laundry, Box 7218; Rt 2, Box 98, Princeton 27569		
Fadum, Dr. Ralph E., (Elaine), Dean Emer., Civil Engr.	2331	781-5286
408 Mann, Box 7908; 2406-J Wesvill Ct., 27607		
Fagan, Dr. Harry, Jr., Physician, Health Serv.	2564	782-5681
Clark Inf., Box 7304; 800 Hardimont Rd., 27609		
Fahmy, Dr. Abdel-Aziz, (Joyce), Prof., Mat. Engr.	3039	832-8653
236 Riddick, Box 7907; 508 Dixie Tr., 27607		
Fairchild, Dr. Erika S., Assoc. Prof. & Dir., MPA Prog.	2481	787-0418
Pol. Sci. & Pub. Admin.		
220 Link Bldg., Box 8102; 3505 Tennyson Pl., 27609		
Fairecloth, Judy B., (Odell), Acct. Tech., Payr. & Ben.	2151	872-1342
Admn. Serv. Ctr., Box 7215; 3019 Sherry Dr., 27604		
Fairley, Dr. Robert A., (Nicki), Vis. Inst., Micro., Path. & Parasit., SVM	829-4317	469-8015
4700 Hillsborough St., Box 8401; 100 White Bluff Ln. 2E, Cary 27511		
Fairman, Lynette A., Lect., Engl.	3863	
208 Tompkins, Box 8105		

Name, Title, Department and Address	Office Phone	Resid. Phone
Fantz, Dr. Paul R., (Janet), Assoc. Prof., Hort. Sci.	3189	469-1177
130 Kilgore, Box 7609; 106 Earhart Cir., Cary 27511		
Farabee, Pamela G., (Jay C.), Clk.-Typ., Bio. Sci. & Pest Mgmt.	3341	828-1914
2717 Bostian, Box 7611; 3229P Calumet Dr., 27610		
Farghal, Dr. Ahmed I., Vis. Scientist, Ent.	3771	
2325 Gardner, Box 7613		
Farid, Dr. Foad, Asst. Prof., Civil Engr.	2331	851-7973
212 Mann, Box 7908; P.O. Box 5655, 27650		
Farmer, Dr. Edgar I., (Barbara Jean), Assoc. Prof., Occup. Educ.	2234	872-4967
502C Poe, Box 7801; 2025 Port Royal Rd., 27609		
Farmer, Fred S., (Becky), Res. Analyst, Crop Sci.	2661	833-4718
4112 Williams, Box 7620; 2509 Fairview Rd., 27608		
Farrell, Clyde M., (Mary), Res. Unit Mgr., Phyt.	2778	467-7342
2003 Gardner, Box 7618; 535 Maynard Rd., Cary 27511		
Farrell, Richard H., (Charlene), Bus. Mgr., Athl.	3475	362-7142
103 Reynolds Coliseum, Box 8501; Rt. 6, Box 241, Apex 27502		
Farrier, Dr. Maurice H., Prof., Ent.	2833	787-1933
4316 Gardner, Box 7613; 4205 Arbutus Dr., 27612		
Fathi, Dr. Yahya, Asst. Prof., Ind. Engr. & Oper. Res.	2362	851-8494
331-D Riddick, Box 7906; 108-E Hunt Club Ln., 27606		
Faucette, Carolyn L., Res. Tech., Gen.	2287	859-1652
2621 Gardner, Box 7614; King's Row Apt. 3212 Octavia St., 27607		
Faulkner, Dr. Gary D., (Mia), Assoc. Prof., Math., Assoc. Dir., Grad. Prog. ...	3261	834-3482
225 Harrelson, Box 8205; 1509 Chester Rd., 27608		
Fauls, Megan L., Med. Lab. Tech., Vet. Teach. Hosp., SVM	829-4200	
4700 Hillsborough St., Box 8401		
Fauntleroy, Dr. Amassa, Prof., Math.	2386	
360 Harrelson, Box 8205		
Fearn, Dr. Robert M., (Priscilla), Prof., Ec. & Bus.	2605	851-1256
6-B Patterson, Box 8109; 1202 Kent Rd., 27606		
Featherstone, Douglas B., (Ellen), Assoc. Dir., Alumni Rel.	3375	782-7771
Alumni Bldg., Box 7503; 2539 Wake Dr., 27608		
Feaver, Dr. Marianne N., (Paul), Assoc. Prof., Zool.	3341	779-1501
2711 Bostian, Box 7617; 8113 Buckskin Ln., Apex 27502		
Federico, Lienne C., Acad. Facilitator, Acad. Skills Prog.	3163	
528-A Poe, Box 7105		
Fedkiw, Dr. Peter S., (Sharon), Assoc. Prof., Chem. Engr.	3572	781-5772
306 Riddick, Box 7905; 8413 Summersprings Ln., 27609		
Fedrowitz, Joseph H., Agri'l. Res. Techn., Hort. Sci.	3347	362-1209
59 Kilgore, Box 7609; Rt. 5, Box 209A, Apex 27502		
Feeny, Dr. Thomas P., Prof., For. Lang.	2475	832-3140
114 1911 Bldg., Box 8106; M3B Cameron Ct., 27603		
Feinberg, Marilyn J., (Kurt Eichenberger), Libr. Clk., Serials	2842	832-6394
G116 Library Box 7111; 708 East Franklin St., 27604		
Felder, Dr. Richard M., Prof., Chem. Engr.	3571	781-1422
316 Riddick, Box 7905; 2417D Wesvill Ct., 27607		
Fennell, Dr. Barbara A., (Tim), Lect., Engl.	3870	544-6130
269 Tompkins, Box 8105; 1001 Limerick Lane, Durham 27713		
Fenner, Melvin J., Hskp. Asst., Phys. Plant	3323	
Park Shops, Box 7219		
Ferguson, Thomas M., Res. Asst., Text.	3469	775-2811
B-22 Nelson, Box 8301; 400 Winterlocken, Sanford 27330		
Ferrell, George D., (Jeanette), Gen. Utility Wkr., Phys. Plant	3408	833-5285
Sullivan Dr., Box 7219; 1808 Louise St., 27610		
Ferrell, Dr. James K., Assoc. Dean, Grad. Progs., Engr.	2345	787-3390
224 Page, Box 7901; 4205 Rowan St., 27609		
Ferrell, Jennie H., (Todd), Sec., Hort. Sci.	3113	872-0277
51 Kilgore, Box 7609; 3228 Pinecrest Dr., 27609		
Ferrell, Ronald E., (Eva), Res. Asst., Bot.	3575	833-0712
3908 Inwood Rd., Box 7632; 401 Furches St., 27607		
Ferrell, William L., Maint. Mech., Phys. Plant	3080	
Armory, Box 7219		
Ferreri, Dr. Linda B., (Eugene), Asst. Prof., Ec. & Bus.	3273	848-4273
306-A Hillsborough Bldg., Box 8109; 6917 River Birch Dr., 27612		

Name, Title, Department and Address	Office Phone	Resid. Phone
Ferster, Dr. Judith I., Assoc. Prof., Engl. 237-A Tompkins, Box 8105; 5823 Sentinel Dr., 27609	3353	878-6147
Fetrow, Dr. John, Assoc. Prof., Food Ani. & Equ. Med., SVM 4700 Hillsborough St., Box 8401	829-4299	481-1827
Fields, Eltweena K., (Michael), Univ. Dining Shuttle Inn SnackBar, Box 7307; 2520 Garner Rd., 27610	2128	828-3006
Fields, John G., (Debra), Univ. Constr. Mgr., Campus Plan. & Const. 219 Oberlin Rd., Box 7216; P.O. Box 1168, 27501	2121	639-4722
Fields, R. C., Jr., (Susan), Acct., Contr. & Grants Leazar, Lower Level, Box 7214; Rt. 25, Box 247D, 27604	2153	266-1703
Fike, Dr. William T., Prof., Crop Sci. 4203 Williams, Box 7620; 3001-G Walnut Creek Pkwy., 27606	3267	859-0488
Fikry, Dr. Mohamed M., (Nadia), Sr. Engr. Ext. Spec., IES & Vis. Prof., MAE 205 Page, Box 7902; 1613 Ridge Rd., 27607	2356	781-1135
Finch, James A., Gen. Utility Wkr., Phys. Plant Recla. Ctr., Box 7219; Rt. 1, Box 46, Spring Hope 27882	3800	478-3112
Finch, Nora Lynn, Asst. Dir., Athl., Women's Athl. 2A Case Athl. Ctr., Box 8501; 1407 Laughridge Dr., Cary 27511	2880	467-2655
Fingeret, Dr. Arlene, Assoc. Prof., Adult & Comm. Coll. 310 Poe, Box 7801; Rt. 10, Box 541-A1, 27603	3590	772-1521
Finkel, Karrie R., (Dr. Martin Kernberg), Asst. Prof., Design 205 Brooks Add., Box 7701; 2209 Alabama Ave., Durham 27705	3051, 3052	286-3729
Finlayson, J. Marc, Prod.-Reporter, UNC Ctr. for Public TV Box 8601; 206 TV Ctr.	2853	
Fischer, Thea J., Vet. Med. Librn., SVM 4700 Hillsborough St., Box 8401; 606 Broadleaf Cir., 27612	829-4219	783-5412
Fischer, William D., Res. Tech., Comp. Ani. & Sp. Species Med., SVM ... 4700 Hillsborough St., Box 8401	829-4200	
Fish, Jamie R., (David), Bio. Res. Tech., Crop Sci., USDA 4105 Williams, Box 7620; 3705 Old Post Rd., 27612	3267	781-6925
Fish, Joann H., (John), Word Processor, Biochem. 128G Polk, Box 7622; 5008 Larchmont Dr., 27612	2581	787-8077
Fishel, Frederick M., (Kelly), Res. Tech., Plant Path. 2420 Gardner, Box 7616; 320 Ridgecrest Rd., Cary 27511	3488	481-0050
Fisher, Dr. Douglas, (Lois), Prof., Ec. & Bus. 220H Patterson, Box 8109; 750-206 Washington St., 27605	2608	839-2069
Fisher, Dr. Dwight S., (Pat), Plant Physiol., Crop Sci., USDA-ARS 1114 Williams, Box 7620; 7216 Bentley Cir., 27604	2657	878-4560
Fisher, Dr. Edward L., (Jackline), Asst. Prof., Ind. Engr. 204 Park Shops, Box 7906; 7001 Eastridge Dr., Apex 27502	7816	779-7567
Fisher, Howard K., Jr., Prof., Mil. Sci. 160 Reynolds Coliseum, Box 7309	2428	
Fisher, Dr. John S., Prof., Civil Engr. 319-E Mann, Box 7908; 12932 Victory Church Rd., 27612	2331	848-8951
Fisher, Mark E., (Michelle Stone), Lect., Ec. & Bus. 310-E Hillsborough Bldg., Box 8110; 4351-1 Avent Ferry Rd., 27606	2885	851-5050
Fisher, Martha L., Media Tech., Phys. Plant 119 Morris, Box 7219; 822 Crawbrook, 27609	2181	787-1031
Fites, Janet L., (Roger), Clk., Zool. 3213 Gardner, Box 7617; 4921 Liles Rd., 27606	2741	851-1874
Fites, Dr. Roger C., (Janet), Prof., Bot. 4209 Gardner, Box 7612; 4921 Liles Rd., 27606	2728	851-1874
Fitzgerald, Dr. Richard J., Res. Assoc., Food Sci. 220 Schaub, Box 7624; Apt. B., 2824 Barmettler St., 27607	2969	755-0894
Fitzgerald, Dr. W. Curtis, (Carolyn Billings), Asst. Head, Phil. & Rel., Asst. to the Dean, Hum. & Soc. Sci. Phil. & Rel., Humanities & Social 100 Winston, M-9 Link, Box 8103, 8101; 2834 Wycliff Rd., 27607	3214, 2468	781-1123
Fitzsimon, Christopher J., (Laura), Prod.-Reporter, UNC Ctr. for Public TV 206 TV Ctr., Box 8601; 4904A Coral Ridge Ct., 27604	2853	872-0118

Name, Title, Department and Address	Office Phone	Resid. Phone
Flammer, Dr. Keven, (Teresa), Asst. Prof., Comp. Ani. & Sp. Species Med., SVM 829-4200	781-5698	
4700 Hillsborough St., Box 8401; 5208 Country Tr., 27612		
Flath, Dr. David J., Assoc. Prof., Ec. & Bus. 3881	859-0322	
207 Hillsborough Bldg., Box 8110; 1325 Swallow Dr., 27606		
Fleisher, Dr. Lloyd N., (Christine), Asst. Prof., Anat., Physiol. Sci. & Radiol., SVM 829-4332	481-0792	
4700 Hillsborough St., Box 8401; 314 Indigo Dr., Cary 27511		
Fleming, Fannie J., Data Control Clk., Dairy Records Proc. Ctr. 2074	832-0963	
Leazar, Box 7623; 2437-H Avent Ferry Rd., 27606		
Fleming, Grover, Mach. Oper. Phys. Plant 3479		
18 Riddick Stad., Box 7219; 7001 Poole Rd., 27610		
Fleming, Dr. Henry P., (Irene), Prof., Food Sci.-USDA 322-A Schaub, Box 7624; 308 Westridge Dr., 27609	2979	787-8621
Fleming, Pamela E., Supv., Media Ctr. 2977	269-5188	
2305 Library, Box 7111; 125 E. Judd St., Zebulon 27597		
Fleming, Dr. Sherrill A., (Greg Morse), Asst. Prof., Food Ani. & Equ. Med., SVM 829-4392	469-9579	
4700 Hillsborough St., Box 8401; 5904 Oxford Green Dr., Apex 27502		
Fleming, William A., (Melinda), Microcomp. Spec., Human Resou. 7844	779-2152	
Admn. Serv. Ctr., Box 7210; 3905 W. Allen St., 27603		
Fletcher, Dr. G. Yates, (Gwen), Asst. Prof., Comp. Sci. 7028	467-6074	
131-D Daniels, Box 8206; 1207 Imperial Rd., Cary 27511		
Flory, J. Roland, (Connie), 4-H Spec., Ext. 4-H & Youth Dev. 3242	469-2443	
208 Ricks, Box 7606; 1412 Mac Duff Ct., Cary 27511		
Floyd, Gene G., (Peggy), Dryer & Finisher, Text. Chem. 2551	847-1335	
22 Clark, Box 8302; 9104 Falls of Neuse Rd., 27609		
Floyd-Gill, Almice D., (Victor), Vet. Tech., Hosp., SVM 829-4200	492-4377	
4700 Hillsborough St., Box 8401; Rt. 3, Box 1051, Henderson 27536		
Fodor, Dr. Ronald V., (Marilyn), Assoc. Prof., Mar., Earth & Atmos. Sci. 7177	851-5931	
210B Withers, Box 8208; 1009 Powell Dr., 27606		
Foegeding, Dr. E. Allen, (Peggy), Asst. Prof., Food Sci. 2964	782-5419	
236-C Schaub, Box 7624; 2309 Weymouth Ct., 27612		
Foegeding, Dr. Peggy M., (Allen), Asst. Prof., Food Sci. 2971	782-5419	
339 E Schaub, Box 7624; 2309 Weymouth Ct., 27612		
Foil, John E., (Marjorie), Asst. Dir. Emer., Agri'l. Ext. Serv.	787-0716	
3313 Redbud Ln., 27605		
Folds, Michael D., HVAC Mech., Phys. Plant 829-4217		
4700 Hillsborough St., Box 8401		
Foley, Edward J., (Alma), Admn. Off., USDA-ARS 2731	851-4515	
51 Kilgore, Box 7610; 1208 Pineview Dr., 27606		
Foley, Eugene F., Plumber, Phys. Plant 2184		
Heating Plant, Box 7219; 227 E. Park, Cary 27511		
Foley, Sandra D., Sec., Acad. Skills Prog. 3163	469-0228	
528-A Poe, Box 7105		
Fonteno, Dr. William C., (Karen), Assoc. Prof., Hort Sci. 3133	851-2708	
152 Kilgore, Box 7609; 3612 Swift Dr., 27606		
Fonville, Patrice B., Libr. Technical Asst., Monographic Cat. 2603		
1121 Library, Box 7111; 1404 Oak Hill Ct., 27610		
Foote, Vincent M., Prof. & Head, Prod. & Vis. Design 2204, 2205, 2206	832-4731	
220 Brooks, Box 7701; 302 E. Forest Dr., 27605		
Forbes, Joan W., (Jack), Counselor, Career Plan. & Place. 2396	848-1235	
28 Dabney, Box 7303; 1701 Lookout Point Ct., 27612		
Forbes, Tonya K., (Tom), Res. Tech., Soil Sci. 2838	362-1090	
3119 Williams, Box 7619; 715 E. Chatham St. Apex 27502		
Ford, Dr. Richard B., (Katherine), Assoc. Prof., Comp. Ani. & Sp. Species Med., SVM 829-4239	847-8049	
4700 Hillsborough St., Box 8401; 204 Emerywood Dr., 27609		
Fore, Julian M., (Berta), Prof. Emer., Bio. & Agri'l. Engr.	787-5019	
1310 Rand Dr., 27608		
Forehand, West L., Printing Estimator, Univ. Graphics 2131	833-0893	
Sullivan Dr., Box 7226; 2138 Milburnie Rd., 27610		
Fornaro, Gene F., (Sharon), Engr. Ext. Spec., IES 2356	846-1927	
1105 Toppe Ridge, 27609		

Name, Title, Department and Address	Office Phone	Resid. Phone
Fornaro, Dr. Robert J., (Patricia), Assoc. Prof., Comp. Sci. 131-M Daniels, Box 8206; 1113 Shadyside Dr., 27612	7848	848-3205
Fornes, Dr. Raymond E., (Gerry), Assoc. Dean, Grad. Sch. Prof., Physics, Grad. Sch., Physics 402 Cox, Box 7102, 8202; 1008 Maple Ave., Apex 27502	7052, 2515	362-7536
Forrest, Kathleen K., (Brad), Stat. Res. Asst., Plant Path. 840 Method Rd., Unit II, Box 7628; 2250 Charles Dr., 40A, 27612	3330	787-8039
Forrest, Margie H., (Robert), Acct. Clk., Dairy Rec., Proc. Ctr. Leazar, Box 7623; 640 Sunnybrook Ln., 27610	7828	832-7319
Forster, Peggy L., (John), Sys. Analyst, Admn. Comp. Serv. Leazar, Lower Level, Box 7209; 4516 Oak Park Rd., 27612	3541	782-0279
Forte, Adolphus, Jr., (Inez), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 300 Gatewood Dr., Garner 27529	3323	834-3595
Forte, Earlie A., (Minnie), Comp. Oper., Comp. Ctr. 127 Hillsborough Bldg., Box 7109; 2133 Ranch Rd., 27520	2517	553-3186
Forte, Roosevelt, Hskp. Supv., Phys. Plant Park Shops, Box 7219; 1710 Bethel Rd., 27610	3323	833-2454
Fostel, Gary N., (Jenni), Instr., Comp. Sci. 242G Daniels, Box 8206; 2022 Wilson St., Durham 27705	7920	286-2321
Foster, John F., Laborer, Phys. Plant Sullivan Dr., Box 7219; 122 Hillcrest, 27605	3408	
Foster, Paula D., (Dallas), Clk.-Typ., Ani. Sci. 245 Polk, Box 7621; 1100 Carlisle St., 27610	2766	828-0434
Foster, W. Rex, (Andree), Acct., Spec. Acct. Serv. 203 Admn. Serv. Ctr., Box 7205; 3712 Donna Rd., 27604	3953	876-6320
Fountain, Dr. Alvin M., (Maxine T.), Prof. Emer., Engl. 2620 Mayview Rd., 27607		833-1055
Fountain, Dr. Benjamin E., (Norma), Vis. Lect., Adult & Comm. Coll. Educ. 310 Poe, Box 7801; 212 Annandale Dr., Cary 27511	3590	467-8438
Foushee, Frances B., Admn. Asst., Hum. & Soc. Sci. 106 Link Bldg., Box 8101; 227 Lynwood Ln., 27609	2467	787-2241
Fouts, Dr. James R., Adj. Prof., Ent. NIEHS, Res. Triangle Park; 212 Ridge Terr., Chapel Hill 27514	541-3506	929-6101
Fowler, Charles W., (Dixie), Oper. Supv., Central Stores Sullivan Dr., Box 7225; 6112 Whittier Dr.	7821	847-5010
Fowler, Owen, Gen. Utility Wkr., Phys. Plant Sullivan Dr., Box 7219; Rt. 4, Box 133, Wake Forest 27687	3408	555-6581
Fowler, Robert E., Agri'l. Res. Asst., Ani. Sci. Rt. 2, Randleigh Farm, Unit 7, Box 7621; Rt. 2, Box E-566	772-6711	772-7977
Fowler, Tony L., Painter, Phys. Plant Park Shops, Box 7219; Rt. 3 Lot 81, Knightdale 27545	3323	266-3243
Fox, Dr. Barbara J., Assoc. Prof., Curr. & Inst. 412-A Poe, Box 7801; 103 Spicewood Pl., Chapel Hill 27514	3221	967-6378
Fox, Clifton E., (Dia), Plumber, Phys. Plant Armory Shops, Box 7219; Rt. 3 Box 424, Wendell 27591	3080	365-4006
Fox, Teresa J., Clk.-Typ., Ani. Sci. 232 Polk, Box 7621; 111 Bogue Ct., Cary 27511	2766	469-9835
Fragoso, Dr. Lino L., Res. Assoc., Gen. 2548 Gardner, Box 7614; 3007A Greenleaf St., 27606	2289	821-1482
Frampton, Dr. L. John, Asst. Prof., For. 1019 Biltmore, Box 8002; 4700 A Blue Bird Ct., 27606	3168	859-0818
Francis, Florence I., Asst. Dir., Fin. Aid 213 Peele, Box 7302; 1515 Battery Dr., 27610	2421	834-4504
Francis, Rosanne C., (Larry), Admn. Asst., SVM 4700 Hillsborough St., Box 8401; 705 Downpatrick Ln., 27609	829-4291	848-2009
Franke, Dr. John E., (Deborah), Assoc. Prof. & Dir., Grad. Prog., Math. 203 Harrelson, Box 8205; 801 Merwin Rd., 27606	2382	851-4985
Franklin, Dr. E. Carlyle, (Cynthia), Prof., For. 103 Enterprise St., Box 8006; 602 S. Hughes St., Apex 27502	3566	362-5958
Franklin, Hilda B., (Eugene), Acct. Clk., Univ. Ext. 204-C McKimmon, Box 7401; 6401 Wrenwood Ave., 27607	2177	851-3234
Franklin, Dr. William G., (Annette), Prof., Speech-Comm. 225 Winston, Box 8104; 6300 Trinity Cir., 27607	2450	851-0420

Name, Title, Department and Address	Office Phone	Resid. Phone
Franks, Edward E., (Cindy), Lab. Mech., Ani. Sci. Reprod. Phys. Lab., 1400 Blue Ridge Rd., Box 7621; 507 Park Dr., Clayton 27520	2673	553-7276
Franks, Gayle H., (Michael), Supv., Motor Pool Sullivan Dr., Box 7219; 8109 Rolling Hills Dr., 27603	2179	
Franks, Kathy A., (Bill), Lab. Ani. Tech., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 6109 Buffaloe Rd., 27604	829-4200	878-8480
Fraser, Barbara M., (Bruce), Sec., Lifelong Educ. 145 McKimmon, Box 7401; 4604 Hunter's Creek Ln., 27606	2265	851-5900
Frazier, Ann Y., (Lewis), 4-H Spec., Ext. 4-H & Youth Dev. 205 Ricks, Box 7606; 1106 Ralph Dr., Cary 27511	3242	467-7158
Frazier, Billie J., (Mike), Admn. Asst., Agri. & Life Sci. 112 Patterson, Box 7601; 3413 Hackney Ct., 27612	2668	847-4010
Frazier, Cathy Y., Bus. Serv. Asst., Comp. Ctr. B16 Hillsborough Bldg., Box 7109; Rt. 1, Box 338, Louisburg 27549	2517	496-5668
Frederick, Dr. Douglas J., (Barbie), Prof., For. 2022C Biltmore, Box 8002; 4405 Dewees Ct., 27612	2891	787-5829
Frederick, Gigi S., (John), Pharmacist, Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; Rt. 2, Box 181, Wake Forest 27587	829-4200	556-7254
Frederick, Libby S., (Charles), Sec., Athl. Case Athl. Ctr., Box 8501; 102 Baldwin Cir., Garner 27529	2109	779-2754
Freedman, Dr. Leon D., (Myrle), Prof., Chem. 432 Dabney, Box 8204; 2006 Myron Dr., 27607	2863	787-7372
Freeman, Don, Stock Clk., Univ. Dining Dining Hall, Box 7307	3963	
Freeman, Eloise C., Hspk. Asst., Phys. Plant Park Shops, Box 7219	3323	
Freeman, Garden C., HVAC Mech., Phys. Plant Armory, Box 7219; 302 Wood St., Cary 27511	3080	469-3651
Freeman, Dr. Harold S., (Ruby), Assoc. Prof., Text. Chem. 217 Clark, Box 8302; 10521 Leafwood Pl., 27612	2551	847-3297
Freeman, John F., Jr., (Catherine), Lect., Graphic Comm./Occup. Educ. 510-L Poe, Box 7801; 405 Latimer Rd., 27609	2234	787-7559
Freeman, Marilyn D., Analyst Programmer, Admn. Comp. Serv. B21 Hillsborough Bldg., Box 7209; 1334-H Wicklow Ct., Cary 27511	2794	469-3193
Freeman, Mary Gail, Acct. Clk., Soil Sci. 2308 Williams, Box 7619	2001	
Freeman, Terry A., Maint. Mech., Univ. Res. Unit 1 4616 Reedy Creek Rd., Box 7601; 4241 Cover Bridge Rd., Clayton 27520	2713	553-5198
French, Becky R., (Wm. D. Harazin), Dir., Tech. Admn., Asst. Univ. Counsel 1 Holladay, Box 7003; 304 Oakwood Ave., 27601	7199	828-6434
Fricke, Peter A., Res. Asst., Ani. Sci. 3720 Lake Wheeler Rd., Box 7621; 917 Seventh Ave. #G205, Garner 27529	2674	779-0183
Friday, Sarah M., Comm. Spec., UNC Sea Grant 105 1911 Bldg., Box 8605; 100-H Woodcreek Dr., Cary 27511	2454	481-4525
Friedrich, R. Wayne, (Doris), Engr. Ext. Spec., IES 212 Page, Box 7902; 1600 Beechwood Dr., 27609	2356	876-1643
Frushour, Dr. Bruce G., Adj. Prof., Text. Chem. Monsanto Co., 730 Worcester St., Indian Orchard, MA 01151	413-788-6911	
Frye, Curtis A., (Wilma), Asst. Track Coach, Athl. 115 Reynolds Coliseum, Box 8501; 103 Margo Cir., Garner 27529	3455	779-6301
Frye, Terry E., (Jean), Learn. Resource Spec., Design 117 Brooks, Box 7701; 223 Trillingham Lane, Cary 27511	2204	467-9118
Fulcher, Graham F., Instru. Mkr., Text. B-35 Nelson, Box 8301; 117 Breedlove Ave., Durham	3074	596-6301
Fuldner, Carol J., (Thomas), Clk., Phys. Plant Armory Box 7219; 212 Summit Ave., 27603	3080	828-5620
Fulenwider, Robert E., Engr. Ext. Spec., IES 204 Page, Box 7902; 7037 Sandringham Dr., 27612	2356	787-9326
Fuller, Dr. Frederick J., (Susan), Asst. Prof., SVM 4700 Hillsborough St., Box 8401; 7420 Valley Run Dr., 27609	829-4279	848-8851

Name, Title, Department and Address	Office Phone	Resid. Phone
Fuller, Dr. Hugh, (Linda P.), Dir., Acad. Skills Prog. 300-D Poe, Box 7105; 713 Blenheim Dr., 27612	3037	787-3667
Fuller, Kathleen M., (Richard), Acct. Clk., Accts. Pay. 213 Admn. Serv. Ctr., Box 7204	3152	851-1216
Fuller, Linda P., (Hugh), Gen. Serv. Librn., Libr. 1209 Library, Box 7111; 713 Blenheim Dr., 27612	3364	787-3667
Fuller, Richard C., Carpenter, Phys. Plant Park Shops, Box 7219	3323	
Fuller, Willie R., Off-Campus Housing Coord., Housing 201 Harris, Box 7315	3821	
Fulp, Carl D., Dir., Eng., Phys. Plant 10-C Riddick Stad., Box 7219; 906 Dogwood Ln., 27607	2181	787-6272
Fulp, Judy K., (Carl), Data Proc. Asst., Agri'l. Ext. Serv. 114 Ricks, Box 7602; 906 Dogwood Ln., 27607	2814	787-6272
Fulp, Dr. Ronald O., (Brenda), Prof., Math. 322 Harrelson, Box 8205; 321 Millbrook Rd., 27609	2370	847-4061
Fulp, William L., II, (Marva), Res. Tech., Min. Res. Lab. 180 Coxe Ave., Asheville 28801; 12 Highland St., Asheville 28801	704-251-6155	704-252-4888
Fulton, John H., (Charlotte), Sys. Analyst, Comp. Ctr. B17-H Hillsborough Bldg., Box 7109; 1328 W. Durham Rd., Cary 27511	2517	467-1380
Funderburg, Margaret I., (John), Sec., Elec. & Comp. Engr. 233 Daniels, Box 7911; 1304 Currituck Dr., 27609	2336	781-1130
Funderlic, Dr. Robert E., (Gail), Prof. & Head, Comp. Sci. 122-C Daniels, Box 8206; 107 Prince Albert Ln., Cary 27511	7825	
Funkhouser, Dr. Edward T., Asst. Prof., Speech-Comm. 2316 Library, Box 8104; 405-C Clover Ln., 27604	3303	834-0219

G

Gabriel, Charles D., (Cecilia), Prog., Analyst, Mar., Earth & Atmos. Sci. 223A Withers, Box 8208; 213 Nature Tr., Chapel Hill 27514	7928	933-0071
Gaddy, Janice J., (Al), Typ., Stat. 612 Cox, Box 8203; 4201 Willow Oak Rd., 27604	2531	755-1174
Gadsby, Dr. John E., Asst. Prof., Anat., Physiol. Sci. & Radiol., SVM 4700 Hillsborough St., Box 8401; 605 Germaine St., Apex 27502	829-4225	362-4519
Gaines, Robert G., (Margaret), Instru. Shop Supv., Bio. & Agri'l. Engr. 130 Weaver, Box 7625; 1115 Imperial Rd., Cary 27511	3101	476-8619
Gajan, James A., (Kathleen), Photo-Typesetter, Agri'l. Comm. G-5 Ricks, Box 7603; 202 North Main St., Franklinton 27525	2791	494-7447
Galambos, Sharon L., (Frank), Sec., Ec. & Bus. 216 Patterson, Box 8109; 2424 Lawrence Dr., 27603	2607	839-1476
Gale, Janice C., (Bobby), Prac. Nurse., Health Serv. Clark Inf., Box 7304; 4211 Fiddler Ct., 27604	2563	876-9656
Gales, Donnie L., Gen. Utility Wkr., Phys. Plant 4700 Hillsborough St., Box 8401; Rt. 1, Box 604, Merry Oaks 27559	829-4217	362-6975
Gallagher, Dr. Daniel L., Res. Assoc., Water Resou. Res. Inst. 225 Page, Box 7912; H-5 Brookside Condos, 529 Hillsborough St., Chapel Hill 27514	2815	942-2251
Gallant, Dr. A. Ronald, (Marcia), Prof., Stat. & Ec. 612-B Cox, Box 8203; 3616 Lubbock Dr., 27612	2531	782-4767
Galler, Dr. William S., (Etta Joan), Prof., Civil Engr. 308 Mann, Box 7908; 2101 Nancy Ann Dr., 27607	2331	787-7756
Galloway, Mebane G., Clk.-Typ., Ani. Sci. 220 Polk, Box 7621; 6901 Buffaloe Rd., Box 151, 27604	2763	266-9539
Garber, Dr. Simon K., (Diane), Ext. Assoc. Prof., Soc. & Anth. 237 1911 Bldg., Box 8107; 603 Black Shoals Dr., Cary 27511	2670	469-1337
Garcia, Dr. Bert H., Jr., (Mary), Prof. Emer., Mech. & Aero. Engr. 4154 Broughton, Box 7910; 807 Beaver Dam Rd., 27607	2365	832-7668
Gardner, Charles R., Media Spec., Text. Ext. & Con. Educ. 223 Nelson, Box 8301; 3710 Greenleaf St., 27606	3761	833-5979

Name, Title, Department and Address	Office Phone	Resid. Phone
Gardner, Dr. Randolph G., Assoc. Prof., Hort. Sci. Mtn. Hort. Crops Res. St., 2016 Fanning Bridge Rd., Fletcher 28732-9628	704-684-3562	
Rt. 2, Box 202C, Horse Shoe 28742	704-891-3405	
Gardner, Dr. Robin P., (Linda G.), Prof., Nuc. Engr. 2110 Burlington, Box 7909; 805 Ivanhoe Dr., 27609	3378	847-0325
Gardner, Thomas E., Jr., Athl.	3956	851-5554
Weisiger-Brown Athl. Fac., Box 8502; 2824 Avent Ferry Rd., Apt. 204, 27606		
Gardner, "Tony" William A., (Terry), Lab Mgr., Text.	3469	779-1536
B-22 Nelson, Box 8301; 308 Forest Manor Dr., 27529		
Gardner, William E., Spec., Ext. For. Resou.	3386	
3028G Biltmore, Box 8003; P.O. Box 37404, 27627		
Garlich, Dr. Jim D., (Doris), Prof., Poul. Sci.	2628	467-9376
22 Scott, Box 7608; 1100 Medlin Dr., Cary 27511		
Garmon, William M., (Martha), Prof. Emer., 4-H, Ext. 4-H Spec., Ext. 4-H & Youth Dev.	3242	467-9902
202 Ricks, Box 7606; 910 Ralph Dr., Cary 27511		
Garner, Donna T., (Sanford), Libr. Asst., Acqs., Libr.	3833	834-8546
3136F Library, Box 7111; 715 N. Kimbrough St., 27608		
Garnett, Conchita M., (William, Jr.), Data Entry Oper., Dairy Rec. Proc. Ctr.	2075	
Leazar, Box 7623; 1009 Caspan St., 27610		
Garoutte, Dennis E., (Genevieve), Asst. Prof., Math.	3100	362-7162
318 Harrelson, Box 8205; 8208 Netherlands Dr., Rt. 4, 27606		
Garren, Dr. Nathan M., (Rebecca), Asst. Prof., Ec. & Bus.	2256	851-4376
209-A Patterson, Box 8109; 1101 Bayfield Dr., 27606		
Garrett, John A., Electronics Tech., Comp. Ctr.	2517	596-5800
128 Hillsborough Bldg., Box 7109; 501 Stoney Creek Circle, Durham 27703		
Garris, Annie B., (Samuel), Hskp. Supv., Phys. Plant	3323	772-4671
Park Shops, Box 7219; 209 Smith Dr., Garner 27529		
Garris, Phyllis Joan, (Lee Vester), Binding Supv., Serials, Bind.	2842	
G-116 Library, Box 7111; 4816A Bluebird Ct., 27606		
Garris, Todd L., Carpenter, Phys. Plant	3323	362-4783
Park Shops, Box 7219; Rt. 1, Box 317, 27562		
Garrison, James R., Jr., (Kathe), Oper. Div. Mgr., SSS	2161	851-2575
SSS, Box 7224; 3408 N. Timberwood Ct., 27606-4461		
Garson, Dr. G. David, (Cynthia), Asst. Dean, Plan. & Mgmt., Prof., Pol. Sci. & Pub. Admin., Hum. & Soc. Sci.	2468	376-6476
M-7 Link Bldg., Box 8101; Box 197C, Rt. 1, Snow Camp 27349		
Gartrell, George A., Tech., Poul. Sci.	2621	821-7633
114 Scott, Box 7608; 2709 Glascock St., 27610		
Garver, Ruth H., (Larry), Data Entry Supv., Admn. Comp. Serv., Data Proc.	2459	779-3847
12 Peele, Box 7208; 1102 Claymore Dr., Garner 27529		
Gaskins, H. Rex, (Rebecca), Agri'l. Res. Tech., Ani. Sci.	2766	787-9289
243 Polk, Box 7621; 1441 Duplin Rd., 27607		
Gaskins, Sarah C., (Robert), Sec., Fin. Aid	2421	847-4516
211 Peele, Box 7302; 11604 Black Horse Run Rd., 27612		
Gates, Dr. Rosalie P., (Jack), CRC Dir., Coop. Ral. Coll.	829-8538	599-6371
Box X120, Meredith Coll., 27607-5298; 230 Crestwood Dr., Roxboro 27573		
Gathings, Doris J., Clk.-Typ., SSS	2161	
SSS, Box 7224; 530 Old Apex Rd., Cary 27511		
Gay, Randy W., Agri'l. Res. Asst., Poul. Sci.	2740	362-4929
Univ. Res. Farm 2, Box 7608; Rt. 5, Box 188, Apex 27502		
Gay, Robert W., Jr., (Brenda), Bus. Off., Agri'l. & Life Sci.	2710	851-5395
120 Patterson, Box 7601; 1226 Lorimer Rd., 27606		
Gebbie, Janet L., Asst. Cat. Librn., Monographic Cat.	2603	851-4285
1121 Library, Box 7111; 1521 Delmont Dr., 27606		
Gebhard, Douglas H., Res. Analyst, Micro., Path. & Parasit., SVM	829-4351	544-5341
4700 Hillsborough St., Box 8401		
Geden, Dr. Christopher J., Res. Assoc., Ent.	2832	834-0403
3321 Gardner, Box 7613; 214-B Elm St., 27601		

Name, Title, Department and Address	Office Phone	Resid. Phone
Gehringer, Dr. Edward F., Asst. Prof., Elec. & Comp. Engr., Comp. Sci.	2336	851-8459
222 Daniels, Box 7911; 308 Merwin Rd., 27606		
Geiger, Rollie G., Head Track/Cross Country Coach, Athl.	3959	851-8403
Weisiger-Brown Athl. Fac., Box 8502; 4247 The Oakes Dr., 27606		
Gentry, Laura Lucille, (Marion Judd), Sec., Development	2034	851-3361
20 Enterprise St., Box 7502; 1201 Athens Dr., 27606		
George, Dr. J. D., (Helen), Ext. Prof. Emer., Adult & Comm. Coll. Educ.	2819	851-2506
Box 7607; 1604 Franklin Rd., 27606		
George, T. Waller, Prof., Text. Engr. & Sci.	3253	782-2550
B-5E Nelson, Box 8301; 5005 Rampart, 27609		
Gerald, Preston, Jr., (Vivian), Tech., Plant Path.	2721	828-1947
2405 Gardner, Box 7616; 2211 Biltmore Ct., 27610		
Gere, Roberta A., Data Control Clk. Dairy Rec. Proc. Ctr.	2074	834-6826
Leazar, Box 7623		
Gerhard-Ewing, Kristin H., Libr. Asst., Text. Libr.	3043	851-8405
112 Nelson, Box 8301; 2800 Avent Ferry, #304, 27606		
Gerig, Dr. Thomas M., (Victoria), Prof. & Grad. Admin., Stat.	2528	782-5202
111 Cox, Box 8203; 1221 Blenheim Dr., 27612		
Gerler, Dr. Edwin S., (Diane), Assoc. Prof., Counselor Educ.	2244	848-3435
520-D Poe, Box 7801; 6413 Dresden Ln., 27612		
Gerstel, Dr. Dan U., (Eva), WNR Prof. Emer., Crop Sci. & Gen.	3267	787-5012
4123 Williams, Box 7620; 1314 Crabapple Ln., 27607		
Gerstner, Dr. Eitan, (Michal), Asst. Prof., Ec. & Bus.	2258	847-9853
18-D Patterson, Box 8109; 1208 Loblolly, 27609		
Getzen, Dr. Forrest W., (Evangeline), Prof., Chem.	3154	782-5101
635 Dabney, Box 8204; 2009 Banbury Rd., 27608		
Geyer, Dr. Paul D., (Janet), Proj. Supv., Urban Aff.	3211	851-7707
278 McKimmon, Box 7401; 3904 Wendy Lane, 27606		
Gholson, Andrew W., Agri'l. Res. Asst., Univ. Res. Unit	2759	821-3092
3720 Lake Wheeler Rd., Box 7601; 411 Dorothea Dr., 27601		
Gibson, Dr. James E., Adj. Prof., Ent.	541-2070	848-6661
CIIT, Res. Triangle Park; 8605 Caswell Pl., 27612		
Giesbrecht, Dr. Francis G., (Margaret), Prof., Stat.	2535	467-6669
604-G Cox, Box 8203; 309 Rustic Ridge Rd., Cary 27511		
Gilbert, Carol M., (William), Sec., Soc. & Anth.	3180	553-5040
301 1911 Bldg., Box 8107; 416 Cardinal Dr., Clayton 27520		
Gilbert, Dr. John H., (Susan), Assoc. Prof. & Asst. Head, Pol. Sci. & Pub. Admin.	2481	828-5163
217 Link Bldg., Box 8102; 311 Forest Rd., 27605		
Gilbert, Michael, Asst. Dir., Staff Supv., Housing & Resid. Life	2406	781-4606
208 Harris, Box 7315; 4117 Deep Hollow Dr., 161, 27612		
Gilbert, Dr. Richard D., (Doris), Prof., Text. Chem.	2551	362-0580
218-B Clark, Box 8302; 1006 Palace Ct., Apex 27502		
Gilbert, Wilbert L., (Carria May), Hskp. Asst., Phys. Plant	3323	772-8994
Park Shops, Box 7219; 7812 Crestwood Dr., 27650		
Gilbert, Dr. William B., Prof., Crop Sci.	2657	787-6888
1130 Williams, Box 7620; 2001 Hillock Dr., 27612		
Gildersleeve, Dr. Richard P., (Sandra), Researcher, Poul. Sci.	856-4185	859-1104
Univ. Res. Farm 2, Box 7608; 1020-A8 Avent Hill, 27606		
Giles, Cheryl G., Res. Asst. & Teach. Tech., Microb. & EM Ctr.	2664	
1219 Gardner, Box 7615; 132 Bay Dr., Cary 27511		
Giles, George W., (Caryl), Prof. Emer., Biol. & Agri'l Engr.		848-7027
27 Springmoor Dr., 27609		
Giles, Joanne B., (Les), Sec., Food Sci.	2952	467-3370
100 Schaub, Box 7624; 2107 Marilyn Cir., Cary 27511		
Gill, Pearlene N., Hskp. Asst., Phys. Plant	3323	266-5473
Park Shops, Box 7219; 7001 Poole Rd., Lot 90, 27610		
Gill, Reginald C., Food Serv. Asst., Univ. Dining	3963	
Dining Hall, Box 7307		
Gill, Teresa, Clk. Typ., Budg.	2175	
206 Holladay, Box 7206		
Gill, Wilma A., Sec., Stu. Aff.	2405	
Thompson Thea., Box 7305; 831-F Suffolk Blvd., 27603		

Name, Title, Department and Address	Office Phone	Resid. Phone
Gilliam, Dr. Henry C., Jr., (Anne), Assoc. Prof., Ec. & Bus.	2258	467-8009
18-A Patterson, Box 8109; 1227 Kingston Ridge Rd., Cary 27511		
Gilliam, Dr. J. Wendell, (Shirley), Prof., Soil Sci.	2636	851-0364
3234 Williams, Box 7619; 1129 Trailwood Dr., 27606		
Gilligan, Dr. John G., (Barbara), Prof. & Grad. Administrator, Nuc. Engr.	2301	469-8736
1110 Burlington, Box 7909; 1028 Sturdevant Dr., Cary 27511		
Gilmartin, Dr. David P., Asst. Prof., Hist.	2483	782-8668
128 Harrelson, Box 8108; 1301 Nottingham Dr., 27607		
Gilmore, Robert C., (Jo), Assoc. Prof., Wood & Paper Sci.	2881	851-4088
Hodges Lab., Box 8005; 5031 Kaplan Dr., 27606		
Gilroy, Dr. Beverly A., Assoc. Prof., Anat., Physiol. Sci. & Radiol. SVM	829-4295	876-1984
4700 Hillsborough St., Box 8401; 1502 Edgeside Ct., 27609		
Ginn, Jennifer M., Lect., Engl.	3854	829-9512
G-131 Tompkins, Box 8105; 2221 Henslowe Dr., 27603		
Giorgino, Pamela R., Libr. Clk., Periodicals Serv. Ctr.	3136	787-0554
Library, Box 7111; 1829 Ridge Rd., 27607		
Gjertsen, Margaret H., Courseware Librn., Physics	7059	781-4114
110 Bureau of Mines, Box 8202; 3421 Cherry Lane, 27607		
Gladden, David L., Agri'l. Res. Tech., Ani. Sci.	3914	851-6836
1200 Grinnells, Box 7626; 4309-2 Avent Ferry Rd., 27606		
Glander, Dr. Molly H., (Ken), Counselor, Counseling Ctr.	2424	688-0451
200 Harris, Box 7312; 1223 Vickers Ave., Durham 27707		
Glass, Dr. J. Conrad, Jr., (Gaynelle), Prof., Adult & Comm. Coll. Educ.	3590	876-4758
310 Poe, Box 7801; 3208 Huntleigh Dr., 27604		
Glasser, Mardi C., Vet. Teach. Hosp., SVM	829-4200	
4700 Hillsborough St., Box 8401; 835-A Barringer Dr., 27606		
Glazener, Dr. Edward W., (Margaret), Assoc. Dean & Dir. Acad. Aff.-SALS	2614	787-4478
115 Patterson, Box 7601; 3424 Lewis Farm Rd., 27607		
Glenn, Cecilia F., Word Proc. Oper., Phys. Plant	2181	
104 Morris, Box 7219		
Glenn, Joyce M., Pers. Asst., Human Resou.	2135	834-7663
Admn. Serv. Ctr., Box 7210; 3070-B Woods Pl., 27607		
Glenn, Mary A., Hskp. Asst., Phys. Plant	3323	832-3815
Park Shops, Box 7219; 204 Cedar St., Apt. A, 27610		
Glenn, Dr. Susan, Asst. Prof., Hist.	2483	834-1921
117 Harrelson, Box 8108; 1902 Alexander Rd., 27608		
Glisson, Dr. Tildon H., (Robin), Prof., Elec. & Comp. Engr.	2336	782-3726
433 Daniels, Box 7911; 2100 Yorkgate Dr., 27612		
Glomb, Walter L., (Bernice (Bea)), Adj. Prof., Elec. & Comp. Engr.	2336	469-8731
232 Daniels, Box 7911; 119 Bruce Dr., Cary 27511		
Glover, Charles K., (Natalie), Instru. Mkr., Mat. Engr.	2875	787-6379
30 Riddick, Box 7907; 1710 Banbury Rd., 27608		
Glover, Christie H., (Steve), Sec., Housing and Resid. Life	2406	362-1649
208 Harris, Box 7315; 1649 Cone Ave., Apex 27502		
Glover, Derald T., Agri'l. Res. Tech., Plant Plath.	2721	362-1632
2411 Gardner, Box 7616; 401 Pinewood Dr., Apex 27502		
Glover, John W., (JoAnn), Ext. Prof., Bio. & Agri'l. Engr.	2675	787-6904
213 Weaver, Box 7625; 3008 Churchill Rd., 27607		
Glover, Joyce A., Clk., Dairy Rec. Proc. Ctr.	7828	772-6570
Leazar, Box 7623; Rt. 3, Box 303, Garner 27529		
Glover, Keith V., (Newton), Sec., Publ., Agri'l. Comm.	3173	237-8493
318 Ricks, Box 7603; Rt. 1, Box 411, Wilson 27893		
Glover, Ophelia E., (Samuel), Acct. Clk., Univ. Ext.	2177	266-2789
204 McKimmon, Box 7401; 108 Green St., Knightdale 27545		
Godavarti, Elizabeth G., (Prasad), Wordprocessor, Acid Dep. Prog., For.	3520	872-8075
1509 Varsity Dr., Box 7632; 1401-234 Millbrook, 27609		
Godfrey, Debora R., (Wayne), Clk.-Typ., For. Lang.	2475	556-2685
120 1911 Bldg., Box 8106; 116 Windsor Dr., Wake Forest 27587		
Godfrey, John W., (Debora), Dupl. Oper., Reg. & Rec.	2572	556-2685
114 Harris, Box 7313; 116 Windsor Dr., Wake Forest 27587		

Name, Title, Department and Address	Office Phone	Resid. Phone
Godwin, Billy H., (Linda), HVAC Mech., Phys. Plant Armory, Box 7219; 204 Cloverdale Dr., Clayton 27520	3080	934-7892
Goetze, Dr. Alfred J., (Laurie), Prof., Elec. & Comp. Engr. 400-A Daniels, Box 7911; 615 Stacy St., 27607	2336	832-5861
Goetze, Pamela R., (David), Libr. Technical Asst., Monographic Cat. 1121 Library, Box 7111; 2008 Talloway Dr., Cary 27511	2603	362-9621
Gold, Dr. Harvey J., (Shirley), Prof., Stat., Biomath., Biomath. Prog. 513F Cox, Box 8203; 1209 Mindees Ct., 27609	2271	787-5391
Goldberg, Robert L., Asst. Prof., Phys. Educ. 2044 Carmichael, Box 8111; 103 Smokehouse Ln., Cary 27511	2488	469-3846
Goldstein, Dr. Irving S., (Helen), Prof., Wood & Paper Sci. 1022M Biltmore, Box 8005; 209 Glasgow Rd., Cary 27511	3181	467-6836
Goldy, Dr. Ronald G., (Kathy), Asst. Prof., Hort Sci. 260 Kilgore, Box 7609; 4024 St. Edmunds Ln., Apex 27502	3133	362-5246
Gonzalez, Dr. Alan A., (Conchita), Prof., For. Lang. 122 1911 Bldg., Box 8106; 604 Fox Chase Ct., 27606	2475	851-6203
Gonzalez, Dr. Gabriel, (Carol Ann), Assoc. Prof., For. Lang. 111 1911 Bldg., Box 8106; 3209 Warwick Dr., 27606	2475	851-4567
Gonzalez, Mariela L., Sec., Soil Sci. Apartado 248, Lima 100 Peru, Box 7619		
Goode, Larry R., (Ellen), Adj. Asst. Prof., Civil Engr. 208 Mann, Box 7908; 6405 Lakeland Dr., 27612		733-4705
Goode, Dr. Lemuel, (Lucy), Prof. Emer., Ani. Sci. 220-B Polk, Box 7621; 3336 Thomas Rd., 27607	2763	787-4561
Goodell, Philip B., Boiler Oper. Shift Supv., Phys. Plant Heating Plant, Box 7219	2184	
Gooding, Dr. Guy V., Jr., (Jan), Prof., Plant Path. 3404 Gardner, Box 7616; 1934 Smallwood Dr., 27605	2751	828-6420
Goodman, Dr. Major M., (Sheila), Prof., Crop. Sci. 1236 Williams, Box 7620; 2309 Blacklan Cir., 27610	2704	828-4709
Goodson, M. Elaine, (Charles H.), RN, Fam. Nurse Pract., Health Serv. Clark Inf., Box 7304; 6405 Dixon Dr., 27609	2564	787-5287
Goodson, Martha M., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 1901 Atkins Dr., 27610	3323	833-9312
Goodwin, Mary V., Clk.-Typ., Ind. Engr. 331-A Riddick, Box 7906; 4409 Old Colony Rd., 27612	2362	781-2524
Goodwin, Thomas G., (Diana), Comp. Coord., Econ. & Bus. 317-A Hillsborough Bldg., Rt. 1, Box 151-A, Morrisville 27560	3041	467-3692
Gordon, Febbie C., (Levern), Data Entry Oper., Admn. Comp. Serv., Data Proc. 12 Peele, Box 7208; 2351 Fox Ridge Manor, 27610	2459	821-3290
Gore, James W., Spec., Agri'l Comm. 2318 Library, Box 7111; 2801-4 Brigadoon Dr., 27606	3971	851-0697
Gosper, Joan M., News Ed., Agri'l Comm. 312 Ricks, Box 7603; 124 York St., Cary 27511	3173	
Goto, Hiroko, Vis. Lect., For. Lang. 124 1911 Bldg., Box 8106; 130-G Cox Ave., 27605	2475	828-0320
Gould, Dr. Christopher R., (Odile M.), Prof., Physics 410-D Cox, Box 8202; 41 Green Mill Ln., Durham 27707	2512	493-1194
Gould, Dr. Fred, (Adrianne), Assoc. Prof., Ent. Unit 1, 840 Method Rd., Box 7628; 1004 Brooks Ave., 27607	2638	834-0537
Gower, Lawrence W., Laun. Mgr., Laun. Laundry, Box 7218; 11109 Crestmont Dr., 27612	2122	848-8089
Gowland, Patricia A., Res. Tech., Soil Sci. 3119 Williams, Box 7619	2838	
Grable-Wallace, Lisa L. (Robert J. Wallace), PCL Coord., Physics 110 Bureau of Mines, Box 8202; 106 Dixie Trail, 27607	7059	834-1309
Grace, Nancy, (Rick), Vis. Lect., For. Lang. 135 1911 Bldg., Box 8106; 122 JoAnne Circle, Cary 27511	2475	469-5696
Gracie, Dr. Larry W., Sr. (Rose), Inst'l. Res. Off., Inst'l. Res. 202 Peele, Box 7002; 1121 Collington Dr., Cary 27511	2776	467-8924
Gracie, Rosalyn L., (Larry), Info. Ctr. Asst., Trans. Welcome Ctr., Box 7221	3205	

Name, Title, Department and Address	Office Phone	Resid. Phone
Grady, James W., Laborer, Phys. Plant Sullivan Dr., Box 7219; 709 Woodland Rd., Garner 27603	3408	779-1512
Grady, Dr. Perry L., (Pat), Assoc. Dean, Text. 107 Nelson, Box 8301; 5206 Huntingwood Dr., 27606	3059	851-7497
Grady, Stanley M., (Betty), Ch. Reac. Oper., Nuc. Reactor Prog. 2123 Burlington, Box 7909; Rt. 3, Box 201, Garner 27529	2322	772-5379
Graeber, John B., Res. Tech., Crop Sci. 1316 Williams, Box 7620; P.O. Box 10281, 27605	3309	
Graf, Dolores G., Purch. Agt., USDA-ARS 51 Kilgore, Box 7610; Rt. 3, Box 357, Apex 27502	2731	
Gragg, Dr. William L., (Dorothy), Assoc. Prof. Emer., Adult & Comm. Coll. Educ. Box 7801; 2150 Indian River Blvd. East, Apt B 201, Vero Beach, FL 32960	305-778-0860	
Graham, Gregory D., Hskp. Asst., Phys. Plant 4700 Hillsborough St., Box 8401; 117 Barbee, Zebulon 27597	829-4200	269-8992
Graham, Meredith, (Pearl), Laborer, Phys. Plant Lands, Serv., Box 7219; Rt. 3, Box 77B, Zebulon 27597	3408	269-9145
Grainger, Dr. John J., (Barbara), Prof. & Dir., Electric Power Res. Ctr. 400 Daniels, Box 7917; 5004 Hermitage Dr., 27612	3517	787-8915
Grand, Dr. Larry F., (Harriet), Prof., Plant Path. & For. 1419 Gardner, Box 7616; 3600 Morningside Dr., 27607	2711	787-6152
Gransee, Dr. Margaret M., (Henry), Coord., Acad. Advancement, Acad. Skills Prog. 100 Reynolds Coliseum, Box 7104; 2125 Buckingham Rd., 27607	7053	787-3532
Grant, Dr. William C., (Harriett), Prof., Zool. 1627-A Gardner, Box 7617; 1427 Laughridge Dr., Cary 27511	2402	467-3503
Grantham, Patricia A., Sec., Human Resou. Admn. Serv. Ctr., Box 7210; 3918 Government Rd., Clayton 27520	7844	
Grantham, Stephanie L., Sec., Admn. Serv., Engr. 101 Page, Box 7901; 2452 Wade Ave., 27607	2310	833-3741
Grantham, Vicki S., Sec., Stat. 509 Cox, Box 8203; 2919 Wade Ave., 27607	2584	787-0756
Gratzl, Dr. Josef S., Prof., Wood & Paper Sci. 3108 Biltmore, Box 8005; 512 Carriage Ln., Cary 27511	2888	469-1280
Graves, Alice M., (Willie), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 318 New Rand Rd., Garner 27529	3323	772-1879
Graves, Charles F., Stock Clk., Phys. Educ. 1217E Carmichael, Box 8111; 711 Penn Rd., 27604	3508	
Graves, Cranor F., (Rita), Counselor, Counseling Ctr. 200 Harris, Box 7312; 1109 E. Morgan St., 27610	2423	828-2268
Graves, Willie, (Pamela), Mail Clk., Phys. Plant Leazar, Box 7219; 2421 Little John Rd., 27610	3974	821-1483
Gray, Dr. Denis O., (Jenifer Maryak), Asst. Prof., Psy. 712 Poe, Box 7801; 6413 Secret Dr., 27612	2251	848-8387
Gray, Frank L., Asst. Area Dir., Res. Life Harris, Box 7315; 105 Watauga, 27695	2406	831-1084
Gray, Margaret K., (David), Print. Equip. Oper., Sch. of Educ. 120 Poe, Box 7801, 1210 Boxwood Ln., 27502	2231	362-1017
Gray, Mary E., Clk., Ec. & Bus. 201-C Patterson, Box 8109; 3208 Ruffin St., 27609	3273	821-7511
Gray, Tommy N., (Carolyn), Agri'l. Res. Tech., USDA-ARS, Plant Path. 107 Unit 3, 840 Method Rd., Box 7629; 3100 Manor Ridge Dr., 27603	3962	772-4232
Gray, William M., (Jeri), News Ed./TV, Agri'l. Comm. 311 Ricks, Box 7603; 2406 Stafford Ave., 27607	3173	832-8176
Green, Ann T., Data Proc. Coord., Hort. Sci. 227-A Kilgore, Box 7609; 219 Main St., Garner 27529	3166	772-2461
Green, Carolyn D., Acct. Clk., Accts. Pay. 213 Admn. Serv. Ctr., Box 7204; 8517 Sawyer Dr., 27612	3152	848-6833
Green, Dr. David P., (Pat), Ext. Spec., Sea Food Lab., Food Sci. P.O. Drawer 1137, Morehead City; 205-B South 19th St., Morehead City 28557	726-7341	247-7532
Green, Eddy H., HVAC Tech., Phys. Plant Armory, Box 7219	3080	
Green, Elmira, Hskp. Asst., Phys. Plant Park Shops, Box 7219; 1606 Pender St., 27610	3323	834-4851

Name, Title, Department and Address	Office Phone	Resid. Phone
Green, Dr. James T., (Peggy), Prof., Ext. Spec. 2314 Williams, Box 7620; 1305 Boxwood, Apex 27502	2246	362-9499
Green, John W., Dir., Bus. & Fin., SVM 4700 Hillsborough St., Box 8401; 1920-204 Eyrie Ct., 27606	829-4383	859-0055
Green, Joseph L., Stock Clk., Central Stores Sullivan Dr., Box 7225; 617 Grantland Dr., 27610	3795	829-9612
Green, Judith A., Asst. Int'l. Stu. Adv., Int. Stu. Off., Stu. Aff. 1201 Student Ctr., Box 7306; P.O. Box 20474, 27619	2961	876-9452
Green, Marianne, Vis. Lec., For. Lang. 135A 1911 Bldg., Box 8106; 510 Phelps Ave., 27607	2475	
Green, Marie A., (James), Pers. Dir., SVM 4700 Hillsborough St., Box 8401; 1408 Beverly Dr., 27610	829-4208	
Green, Sandra D., Lab. Ani. Tech., Lab. Ani. Resou., SVM 4700 Hillsborough St., Box 8401; 100 Horne St., Apt. 1, 27607	829-4201	829-1852
Greene, Amanda L., R.N. Fam. Nurse Pract., Health Serv. Clark Inf., Box 7304; P.O. Box 574, Carrboro 27510	2563	929-8874
Greene, Frances V., (Bert), Sales Clk., SSS SSS, Box 7224; 3412 Dogwood Dr., 27604	2161	872-2643
Greene, Jackie, Hskp. Asst., Phys. Plant Park Shops, Box 7219; 1709 Proctor Rd., 27610	3323	834-8065
Greene, Robert R., Agri'l. Res. Asst., Ani. Sci. 3720 Lake Wheeler Rd., Univ 2, Box 7621; Blue Skies Mobile Home Living, Lot 66, 27502	2674	772-5497
Greene, Dr. Russell T., Intern. Med. Resid., Comp. Ani. & Sp. Species Med., SVM 4700 Hillsborough St., Box 8401; 3100 Crandon Ln., 27604	829-4260	872-8879
Greenlaw, Dr. Ralph W., (Kaye), Prof. Emer., Hist. 134 Harrelson, Box 8108; 1310 Mayfair Rd., 27608	2484	781-3306
Greenlee, Genevieve M. Kyer, Spec., Housing & House Furn. P.O. Box 864, Greensboro 27402		273-0789
Gregory, Anne Y., (Michael), Lect., Engl. 102 Tompkins, Box 8105; 813 Merwin Rd., 27606	3854	851-3443
Gregory, Brenda E., (Steve), Clk.-Typ., Lab Ani. Res., SVM 4700 Hillsborough St., Box 8401; 902 Buckingham Rd., Garner 27529	829-4280	772-6180
Gregory, E. Michael, (Anne), Lab. Supv., Engr. Res. Serv. Div. 3150 Burlington, Box 7903; 813 Merwin Rd., 27606	2348	851-3443
Gregory, Dr. James D., (Janice), Assoc. Prof., For. 3024A Biltmore, Box 8002; 1500 Lake Dam Rd., 27606	2891	851-7536
Gregory, John H., (Joyce), Sr. Ext. Area Lvstk. Spec., Ani. Sci. Wilkes Co. Office Bldg., Wilkesboro 28697 1433 Westwood Ln., 28697	651-7336	667-5769
Gregory, Kelly M., (Kevin), Vet. Tech., Vet. Teach. Hosp., SVM 4616 Reedy Creek Rd., Unit I, Box 7621; Rt. 1, Box 123, Apex 27502	829-4260	779-3316
Gregory, Dr. Max E., (Ellen), Ext. Prof., Food Sci. 129-H Food Sci., Box 7624; 4133 White Pine Dr., 27612	2956	787-2101
Gregory, Robert B., (Carol), Sect. Head, Visual Comm., Agri'l. Comm. G-1 Ricks Annex, Box 7603; 2530 Medway Dr., 27608	2861	834-4275
Gregory, William A., APMS, Mil. Sci. 154 Reynolds Coliseum, Box 7309	2428	
Grennes, Thomas J., (Janet), Assoc. Prof., Ec. & Bus. 220-E Patterson, Box 8109; 2706 Rosedale Ave., 27607	2608	828-7067
Grice, J. Susan, Clk.-Recept., Phys. Educ. 2000 Carmichael, Box 8111; 3209 H Calumet Dr., 27610	2488	833-6221
Grice, Joyce A., Clk.-Typ., Civil Engr. 208 Mann, Box 7908; 3911 Greenleaf St., 27606	2331	828-5329
Grice, Mary J., Med. Lab. Tech., SVM 4700 Hillsborough St., Box 8401; 6205 Arrington Rd., 27607	829-4341	851-1730
Griego, Martha R., (Mario), Acct. Clk., Athl. 103 Reynolds Coliseum, Box 8501; 600 Dylan Ct., 27606	3050	851-0732
Griffin, Aline L., (J. R.), Acct. Clk., Dairy Rec. Proc. Ctr. Leazar, Box 7623; Rt. 2, Box 389, Knightdale 27545	7828	266-9941

Name, Title, Department and Address	Office Phone	Resid. Phone
Griffin, Ann M., (John), Clk.-Typ., Bio. & Agri'l. Engr. 120 Weaver, Box 7625; Rt. 1, Box 285-D, Holly Springs 27540	3101	552-9539
Griffin, Carl R., Agri'l Res. Asst., Univ. Res. Unit 2 3720 Lake Wheeler Rd., Box 7601; P.O. Box 1441, Wendell 27591	2759	
Griffin, Gary R., (Diane), Oper. Mgr., Dairy Rec. Proc. Ctr. Leazar, Box 7623; 3509 Timberwood Ct., 27606	2632	851-3639
Griffin, Dr. Hariette O., (Phil), Lect., Ec. & Bus. 306-E Hillsborough Bldg., Box 8110; 2304 Fairview Rd., 27608	2472	782-3248
Griffin, Dr. Harold C., (Linda), Asst. Prof., Curr. & Inst. 402D Poe, Box 7801; 312 Holland Hills Dr., Goldsboro 27530	3221	734-8320
Griffin, Joan S., Acad. Coord. for Minority Stu., Lect., Engl., Hum. & Soc. Sci. 286 Tompkins, Box 8101; 1314 Gardencrest Cir., 27609	7456	787-0588
Griffin, Peggy W., Sec., Reg. & Rec. 100 Harris, Box 7313; 104 Drumbaie Pl., Garner 27529	3084, 2572	779-4436
Griffin, Thomas H., Asst. Dir., Admis. 112 Peele, Box 7103; 5209 Cabin Pl., 27609	2437	876-8945
Griffis, Dr. Dieter P., (Ann), Res. Assoc., Engr. Res. Serv. Div. 1131 Burlington, Box 7903; Rt. 1, Box 102, Morrisville 27560	7659	362-9565
Griffith, Dr. Wayland C., (Sylvia), Prof., Mech. & Aero Engr. 3217A Broughton, Box 7910; 809 Rosemont Ave., 27607	3024	828-3160
Grigsby, Nancy N., (Carroll), Accts. Rec. Clk., SSS SSS, Box 7224; 820 Davidson St., 27609	2161	787-5759
Grimes, Dr. Barbara H., (Larry), Vis. Lect., Zool. 1627-A Gardner, Box 7617; 705 Chatham Ln., 27610	2402	821-1606
Grimes, Earnest R., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 325 Angier Ave., 27610	3323	829-9675
Grimes, Joan J., (Ben), Sec., Ext. Ec. 311 Hillsborough Bldg., Box 8110; Rt. 1, Coats 27521	2885	894-8381
Grimes, John P., Lab. Ani. Tech., Lab. Ani. Resou., SVM 4700 Hillsborough St., Box 8401; 4805 Tapers Dr., Box 101, 27604	829-4201	
Grimwood, Dr. J. Michael, (Linda Wootton), Assoc. Prof., Engl. 2500 Tompkins, Box 8105; 346 Wilmot St., 27606	3870	851-0764
Grindem, Dr. Carol B., Asst. Prof., Micro., Path., & Parasit., SVM 4700 Hillsborough St., Box 8401; 5812 Allwood Dr., 27606	829-4277	832-6194
Grissom, Greg, Engr., UNC Ctr. for Pub. TV TV Ctr., Box 8601; 3100 G Kings Ct., 27606	2853	851-0944
Grissom, Markiver, Jr., Mail Clk., SVM 4700 Hillsborough St., Box 8401; 704 Weston St., 27610	829-4200	821-1977
Grissom, Dr. Raymond E., Jr., (Lorraine), Res. Assoc., Ent. Unit 4, Method, Box 7633; 3412 Skycrest Dr., 27604	2275	872-6090
Grizzle, Mary K., Res. Tech., Anat., Physiol. Sci. & Radiol., SVM 4700 Hillsborough St., Box 8401	829-4200	
Groff, Dr. Judy M., (Donald), Ext. Asst. Prof., Ext. 4-H & Youth Dev. 205 Ricks, Box 7606; 6404 Winthrop Dr., 27612	3242	
Grosch, Dr. Daniel S., (Edith), Emer. Prof., Gen. 3513 Gardner, Box 7614; 1222 Duplin Rd., 27607	2292	787-5219
Gross, Dr. H. Douglass, (Jeannette), Prof., Crop Sci. 1312 Williams, Box 7620; 3417 Horton St., 27607	3309	782-2468
Gross, Larry M., (Kit), Soccer Coach, Athl. Case Athl. Ctr., Box 8501; 801 Nuttree Pl., 27606	3476	
Grossfeld, Dr. Robert M., (Margaret), Assoc. Prof., Zool. 1620 Gardner, Box 7617; 1709 Belemeade St., 27607	3018	851-1720
Grosshandler, Dr. Stanley L., Adj. Assoc. Prof., Anat., Physiol. Sci. & Radiol., SVM Raleigh Stress & Pain Clinic, Box 8401	829-4220	
Grover, Elliot B., (Marion B.), Prof. Emer., Text. 70 Mediterranean N., Port St. Lucie, FL 33452	305-878-4201	
Groves, Linda S., Data Entry Oper., Dairy Rec. Proc. Ctr. 123 Leazar, Box 7623; 4137 Chapel Hill Rd., 18, Durham 27707	2075	489-2508
Grubb, Dr. Barbara R., (Stephen), Vis. Asst. Prof., SVM 4700 Hillsborough St., Box 8401; Rt. 2, Box 82-B, Hillsborough 27278	829-4200	732-6847

Name, Title, Department and Address	Office Phone	Resid. Phone
Grubb, Barbara Ward, (Gary S.), Asst. Curator of Art, Univ. Stu. Ctr. 4110 Univ. Stu. Ctr., Box 7306; 1300 Seabrook Ave., Cary 27511	3503	467-4173
Guerrant, Sue, (Bill Lord), Res. Tech., Crop Sci. 840 Method Rd., Unit 3, Box 7629; Rt. 2, Box 36, Louisburg 27549	3281	496-2341
Guess, Estelle N., Acct. Clk., Agri'l. Ext. Admin. 120 Patterson, Box 7601; 616 Appleton Dr., 27606	3159	851-6792
Guess, Dr. Frank M., Asst. Prof., Stat. 604-D Cox, Box 8203; 3020-10 Spanish Ct., 27607	2535	821-1607
Gueth, C. Moreland, III, Res. Tech., Ext. For. Resou. 3028 Biltmore, Box 8003; 1521 Beichler Rd., Garner 27529	3386	772-4878
Guin, Vickie C., (Larry), Photo. Set., Univ. Graphics Sullivan Dr., Box 7226; 2027 Simpkins Rd., 27603	2131	772-9047
Guinnup, Dr., David E., Asst. Prof., Chem. Engr. 221 Riddick, Box 7905; 701 Barksdale Dr., 27604	2329	828-3531
Guirguis, Dr. Georges H., (Renee), Asst. Prof., Math. 313 Harrelson, Box 8205; 3213 Edgetone Dr., 27604	7440	878-1670
Gull, Gayenell C., (Timothy), Lect., Graphic Comm. Occup. Educ. 510-C Poe, Box 7801; 7704 Red Rock Dr., Apex 27502	2234	772-5213
Gunter, Dorothy M., Membership Rec., Wolfpack Club College Inn, Box 8602; 511 N. Glen Dr., 27609	2112	787-3164
Gupta, Dr. Ajaya K., (Purnima), Prof., Civil Engr. 224 Mann, Box 7908; 808 Ivanhoe Dr., 27609	2331	847-8098
Gupta, Dr. Bhupender S., (Vasudha), Prof., Asst. Head & Grad. Administrator, Text. Engr. & Sci. 108 Nelson, Box 8301; 5005 Lakemont Dr., 27609	3253	782-2633
Gurgis, Ramzy Y. (Samira), Agronomist, Crop Sci. 4116 Reedy Creek Rd.; 5616 Ashton Dr., 27612	3560	787-6978
Gurley, Charles, Carpenter, Phys. Plant Park Shops, Box 7219	3323	
Gurley, Dr. Edward D., (Millicent), Assoc. Prof., Civil Engr. 312 Mann, Box 7908; 4732 Radcliff Rd., 27609	2331	787-8877
Guth, Jan M., (David), Acct. Tech., Univ. Dining 217 Harris, Box 7307; 704 Powell Dr., Garner 27529	3090	779-2799
Guthrie, Caroline B., Reg. Clk., Reg. & Rec. 100 Harris, Box 7313; 823 Beaver Dam Rd., 27607	2572	834-7267
Guthrie, Dr. David S., Asst. Prof. & Ext. Spec., Crop Sci. Ext. 4208 Williams, Box 7620; 314 Georgetown Rd., 27608	3331	828-0857
Guthrie, Evelyn J., Acct. Tech., Contr. & Grants Leazar, Lower Level, Box 7214	2153	
Guthrie, Dr. Frank E., (Bee), Prof., Ent. Unit 4, Method, Box 7633; 823 Beaver Dam Rd., 27607	2276	834-7267
Guthrie, Randy W., Ext. Beef Testing Spec., Ani. Sci. Bull Testing Station, NCSU Res. Unit 10, Butner; Rt. 1, Box 106-C, Stem 27581	477-8169	575-6078
Guy, Dr. James S., Asst. Prof., Micro., Path. & Parasit., SVM 4700 Hillsborough St., Box 8401; 1436 Lake Pine Dr., Cary 27511	829-4287	467-1411
Guzman, David R., (Karen), Res. Asst., Ent. Gardner, Box 7613; 4000 Wickenham Ct. Apt. 303, 27612	2832	782-6421
Guzzo, Robert, Wrestling Coach, Athl. Weisiger-Brown Athl. Fac., Box 8502; 5007 Wickham Rd., 27606	3548	851-4602
Gwyer, Betty L., (Chester V.), Sec., Stu. Aff. 205 Peele, Box 7317; 4913 Cindy Dr., 27603	2962	779-2340
Gwyn, Robert G., (Inez), Asst. Prof., Phys. Educ. 2042 Carmichael, Box 8111; 410 Cooke St., Apex 27502	2487	362-7897
Gwynn, Dr. G. Richard, (Peggy), Prof., Res. Agro., Crop Sci. Tob. Res. Lab., P. O. Box 1555, Oxford 27565 Rt. 1, Box 66C, Oxford 27565	693-5151	693-5339

H

Haase, Dr. David G., (Jennifer), Assoc. Prof., Physics 406-A Cox, Box 8202; 1324 Swallow Dr., 27606	2515	851-3113
---	------	----------

Name, Title, Department and Address	Office Phone	Resid. Phone
Habeck, Elizabeth K., Sys. Analyst, Comp. Ctr. B171 Hillsborough Bldg. Box 7109	2517	
Hader, Dr. Robert J., (Dorothy), Prof. Emer., Stat. 509 H Cox, Box 8203; 3313 Cheswick Dr., 27609	2584	782-1898
Hafley, Dr. William L., (Betty), Prof., For. & Stat. 3024-D Biltmore, Box 8002; 5207 Melbourne Rd., 27606	2891	851-7317
Hagins, Peggy A., Data Entry Oper., Admn. Comp. Serv., Data Proc. 12 Peele, Box 7208; 308 Pine St., Smithfield 27577	2459	934-5555
Hagler, Dr. Winston M., Jr., (Sarah), Assoc. Prof., Mycotoxin Lab., Poul. Sci. 201-A Mycotoxin Lab., Box 7608; Rt. 1, Box 307A, Holly Springs 27540	2729	552-6428
Haigler, Julie A., Agri'l. Res. Tech., Crop Sci. 4122 Williams, Box 7620; 3946 D Marcom St., 27606	3267	
Hain, Dr. Fred P., (Dianne), Prof., Ent. B1104 Grinnells, Box 7626; 4721 Rembert Dr., 27612	3804	781-4385
Haines M. Elizabeth, Res. Tech., For. For. Res. Annex Lab., Box 8007; 21 Daisy St., 27607	3596	833-5087
Hairston, Ronald K., Proj. Counselor, Upward Bound 205 Peele, Box 7317; 3111-M Walnut Creek Pkwy. N, 27606	3632	859-1830
Hale, Dr. Francis J., (Mary Alice), Prof., Mech. & Aero. Engr. 4160 Broughton, Box 7910; 2853 Rue de Sans famille, 27607	3241	781-6672
Hale, Grace J., Admn. Sec., Adult & Comm. Coll. Educ. 120 Ricks, Box 7607; 4517 Latimer Rd., 27609	2707	787-0628
Hale, Susan A., Res. Tech., Food Sci. 336 Schaub, Box 7624; 125 Brooks Ave., Apt. C, 27607	2974	821-3433
Haley, Shirley L., Typ., Stat. 614 Cox, Box 8203; 3939 Glenwood Ave 654, 27612	2532	782-5446
Hall, Dr. Alastair R., Asst. Prof., Ec. & Bus. 207-C Hillsborough Bldg., Box 8110; 2404 B. Everett Ave., 27605	3881	833-0192
Hall, Dr. Carol K., Assoc. Prof., Chem. Engr. 121 Riddick, Box 7905; 10716 Dunhill Terr., 27609	2499	
Hall, Carolyn J., Food Serv. Asst., Univ. Dining Erdahl-Cloyd Annex, Box 7307	3270	
Hall, Charlie R., Grounds Wkr., Phys. Plant Sullivan Dr., Box 7219; Box 504, Spring Hope 27882	3408	478-5334
Hall, Cynthia E., (William), Clk., Photocopy Serv. 1222 Library, Box 7111; 2808 Fowler Ave., 27607	2343	
Hall, Donna P., (Charles), Libr. Asst., For. Resou. Libr. 4012 Biltmore, Box 8001; 210 Pace St., 27604	3513	828-1575
Hall, Dora H., Clk.-Typ., Mar., Earth & Atmos. Sci. 214 Withers, Box 8208; 3313 Mesa Ct., 27607	3711	787-8780
Hall, Endia B., (Bernard), Coord., Afro-American Stu. Aff., Stu. Dev. 211 Harris, Box 7314; 7327 Sweet Bay Ln., 27609	3835	
Hall, Dr. George L., Prof., Physics 104 Bureau of Mines, Box 8202; 3500 Palm Ct., #103, 27607	7916	
Hall, James A., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 504 Rock Quarry Rd., 27610	3323	
Hall, Lindberg, Hskp. Asst., SSS SSS, Box 7224; 304 S. State St., 27601	2161	833-4025
Hall, Marchia A., (Duke), Sec.-Clk., Book Div., SSS SSS, Box 7224; 2249 Foxridge Manor Rd., 27610	3117	832-6802
Hall, Marie K., Sec., Crop Sci. 4309 Williams, Box 7620; 1504 MacDonald Ave., Garner 27529	3216	772-8686
Hall, Michele D., Reserv. & Catering Coord., Stu. Aff. 2102 Univ. Stu. Ctr., Box 7306; 105 N. East St., Apt. 1, 27601	2249	
Hall, Shirley W., (Bill), Sec., Univ. Ext. 219 McKimmon, Box 7401; 5816 Old Forge Cir., 27609	3373, 3010	876-8649
Hall, Timothy S., Agri'l. Res. Tech., Crop Sci. 1105 Williams, Box 7620; 4818 Montacute St., 27606	2657	851-3629
Hall, Vennie A., Hskp. Asst., Phys. Plant Park Shops, Box 7219	3323	
Hall, W. Watson, (Evelyn), Agri'l. Res. Tech., Hort. Sci. 68 Kilgore, Box 7609; Rt. 1, P.O. Box 335, Garner	3346	553-6705

Name, Title, Department and Address	Office Phone	Resid. Phone
Halperen, Dr. Max, (Vivian), Prof., Engl.	3870	787-9660
225 Tompkins, Box 8105; 2606 Wells Ave., 27608		
Halstead, Samuel C., (Rebecca), Lect., Phys. Educ.	3161, 3162	467-1532
2012 Carmichael, Box 8111; 110 Misty Ct., Cary 27511		
Hamann, Dr. Donald D., (Wyonne), Prof., Food Sci.	2959	787-6197
116-B Schaub, Box 7624; 4205 Weaver Dr., 27612		
Hamann, Hans K., Assoc. Stat. & Lect., Stat.	2535	847-1403
604-E Cox, Box 8203; 5830 Six Forks Rd., 27609		
Hambourger, Lynda H., (Robert M.), Coord. Evening Prog. & Asst. to the Dean, Dean's Off., Hum. & Soc. Sci.	3638	781-3596
G-103C Tompkins, Box 8101; 2509 Kenmore Dr., 27608		
Hambourger, Dr. Robert M., (Lynda), Assoc. Prof., Phil., Phil. & Rel.	3214	781-3596
118 Winston, Box 8103; 2509 Kenmore Dr., 27608		
Hamby, Dame S., (Estelle), Dean, Text.	3231	832-2619
101 Nelson, Box 8301; 319 Golf Course Dr., 27610		
Hamid-Samimi, Dr. Mohammad H., Res. Assoc., Food Sci.	2959	787-6254
124 Schaub, Box 7624; 4401 Woodbury Rd., 27612		
Hamilton, Dr. Pat B., (Dolores), Prof., Poul. Sci.	2623	787-6138
225 Scott, Box 7608; 4116 Windsor Pl., 27609		
Hamilton, Rick A., (Jennifer), Spec., Ext. For. Resou.	3386	469-0101
3028-D Baltimore, Box 8003; 816 Madison Ave., Cary 27511		
Hamilton, Ruth M., Admn. Asst., Univ. Dining	2403	787-7285
Dining Hall, Box 7307; 4813 Radcliff Rd., 27609		
Hamilton, Dr. Vance E., (Ann), Acting Asst. Dir., Comm. Rural Dev., Agri'l. Ext. Serv.	3467	467-8928
304 Ricks, Box 7602; 247 E. Cornwall St., Cary 27511		
Hamlet, John R., (Susan), Sys. Manager, Admn. Comp. Serv.	2794	467-5737
B-21 Hillsborough Bldg., Box 7209; 1226 Old Apex Rd., Cary 27511		
Hamlett, Shirley N., (Charles), Libr. Tech. Asst., Serials	3584	362-4853
G-116 Library, Box 7111; Rt. 5, Box 323, Apex 27502		
Hamm, Brenda L., (Kevin), Analyst Programmer, Admn. Comp. Serv.	2794	269-4050
B 21 Hillsborough Bldg., Box 7209; RR 5 Box 359, Zebulon 27597		
Hamme, Dr. John V., (Shirley), Assoc. Prof. Emer., Mat. Engr.		851-5459
1312 Onslow Rd., 27606		
Hammerberg, Dr. Bruce, Assoc. Prof., Microb., Path. & Parasit., SVM	829-4200	
4700 Hillsborough St., Box 8401; 808 Reedy Cr. Rd., Cary 27511		
Hammett, Dr. Wilma S., (Larry), Ext. Interior Design Spec., Home Ec. Agri'l. Ext.	2770	847-3064
210 Ricks, Box 7605; 11705 Trottenham Rd., 27614		
Hammon, Gordon A., (Johnnie), Assoc. Prof., Rec. Resou. Admin.		787-6896
2800 Rue de Sans famille, 27607		
Hammond, Ann J., Acct. Tech., Contr. & Grants	2153	
Leazar, Lower Level, Box 7214		
Hammond, Cynthia S., (Leigh), Res. Tech., Bio. & Agri'l. Engr.	3121	787-2601
270B Weaver, Box 7625; 4017 Edwards Mill Rd., 27612		
Hammond, Dr. Frank M., Asst. Dir., Music	2981	851-2564
204 Price Music Ctr., Box 7311; 1417 Fairway Ridge Dr., 27606		
Hammond, Teresa H., (Rusty), Analyst Programmer, Admn. Comp. Serv.	3640	851-5097
1212 Blue Ridge Rd., Box 7227; 827 Athens Dr., 27606		
Hammond, Dr. Thomas N., Assoc. Prof., For. Lang.	2475	821-4975
121 1911 Bldg., Box 8106; 116 Lord Ashby Rd.		
Hamouda, Dr. Hechmi, (Marcie), Asst. Prof., Text. Engr. & Sci.	3481	834-0938
302 Nelson, Box 8301; 3918-D Marcom St., 27606		
Hampton, Natalie E., (Kyle), Edit. Asst., Info. Serv.	3470	878-6657
219 Oberlin Rd., Box 7504; 3612 Allendale Dr., 27604		
Hamrick, Amy L., Sec., Gen.	2287	552-9289
2545 Gardner, Box 7614; 204 Long St., Fuquay-Varina 27526		
Hamrick, Laura L., (Jerry), Acct. Clk., Central Stores	2197	772-2555
Sullivan Dr., Box 7225; 1505 Ainsworth Dr., Garner 27529		
Hamrick, Sybil F., (Allen L.), Sec., Public Safety	2156	552-9289
Field House, Box 7220; 204 Long St., Fuquay-Varina 27526		
Hanck, Dr. Kenneth W., Prof. & Head, Chem.	2545	781-3526
208A Dabney, Box 8204; 3457 Leonard St., 27607		

Name, Title, Department and Address	Office Phone	Resid. Phone
Hancock, Charles N., Agri'l. Res. Tech., Hort. Sci.	3346	
68 Kilgore, Box 7609		
Hand, Dr. Michael S., (Ruth), Adj. Assoc. Prof., Anat., Physiol. Sci. & Radiol., SVM	829-4220	362-9827
Mark Morris Assoc., Topeka, KS., Box 8401; Rt. 4, Box 69-X, Apex 27502		
Handlin, Penny M., Sec., Wood & Paper Sci.	2888	839-8627
2109 Biltmore, Box 8005; 3000 Spanish Ct., Apt. 9, 27607		
Haning, Dr. Blanche C., (Quentin), Assoc. Prof., Plant Path. & Ent. Coord., Integrated Pest Mgmt. Curr.	3341	782-7239
2705 Bostian, Box 7611; 3807 Laurel Hills Rd., 27612		
Hankins, John V., Stu. Serv. Rep., Text.	3780	
S-62 Nelson, Box 8301; 4335-1 Aventura Ferry Rd., 27606		
Hankins, Dr. Orlando E., (Gail), Asst. Prof., Nuc. Engr.	3292	266-0595
2112 Burlington, Box 7909; 3500 Casine Court, Wake Forest 27587		
Hanna, Dr. Ashley Y., Res. Tech., Anat., Physiol. Sci. & Radiol., SVM ..	829-4200	834-3406
4700 Hillsborough St., Box 8401; 2735 Broadwell Dr., 27606		
Hannon, Pat E., Supv., Trade Serv., Phys. Plant	3323	878-8982
3 Park Shops, Box 7219; North Ridge Villas, 1533 Laureldale Dr., 27609		
Hanover, Anita T., Sched. Supv., Reg. & Rec.	2577	851-1189
100 Harris, Box 7313; 6509 Brandywine Rd., 27607		
Hanover, Stephen J., Assoc. Prof. & Spec., Ext. For. Resou.	3386	833-6695
3036-B Biltmore, Box 8003; 2300 Aventura Ferry Rd., Apt. H2, 27606		
Hansen, Dr. Arthur P., (Marilou), Assoc. Prof., Food Sci.	2964	772-2232
236 Schaub, Box 7624; Rt. 3, Box 202, Garner 27529		
Hansen, Dr. Donald J., Asst. Prof., Math.	3350	
236 Harrelson, Box 8205; 2804-303 Aventura Ferry Rd., 27606		
Hanson, Brian R., Patrol Off., Public Safety	3206	
Field House, Box 7220		
Hanson, Dr. Durwin M., (Marjorie), Prof. Emer., Occup. Educ.	2234	787-0970
4661 Mill Village Rd., 27612		
Hanson, Dr. Warren D., (Marilyn), Prof., Gen.	7931	787-4116
840 Method Rd., Unit #4, Box 7633; 1201 Westmoreland Dr., 27612		
Hardee, Kathryn B., (James A.), Asst. to the Curator of Art, Stu. Aff.	3503	787-5594
4110 Univ. Stu. Ctr., Box 7306; 108 Cardinal Dr., Fuquay-Varina 27526		
Hardee, Richard L., (Mary), Mgmt. Engr., Phys. Plant	2181	839-1854
109 Morris, Box 7219; 5629 Penny Rd., 27606		
Harden, Rebecca S., (Dan), Recept., SVM	829-4200	469-1162
4700 Hillsborough St., Box 8401; 410 Melody Ln., 27511		
Harder, Dr. John J., (Maria), Assoc. Prof. Emer., Ind. Engr.	2362	787-3895
329 Riddick, Box 7906; 1204 Gunnison Pl., 27609		
Hardie, Dr. Elizabeth M., (Rip), Asst. Prof., Comp. Ani. & Sp. Species Med., SVM	829-4352	779-6914
4700 Hillsborough St., Box 8401; 5313 Lake Wheeler Rd., 27603		
Hardin, Dr. James W., Prof. & Curator, Bot.	2226	834-1598
3205 Gardner, Box 7612; 204 Furches St., 27607		
Hardison, Jane F., (Bill), Sec.-Treas., N.C. Found. Seed Prod.	2821	828-1988
4025 Beryl Rd., Box 8603; 2705 Bromley St., 27610		
Hardison, Marianna D., (Glenn McMahon), Lect., Engl.	3870	362-9214
206 Tompkins, Box 8105; Rt. 1, Box 11-C, New Hill 27562		
Hardison, Rosalind T., (Gary), Typ., Stat.	2534	848-8415
608 Cox, Box 8203, 1209 Nikole Ct., 27612		
Hardman, B. Kevin, Sys. Prog., Comp. Ctr.	2517	481-1306
Hillsborough Bldg., Box 7109; A3 106 Rubin Ct., Cary 27511		
Hardy, Irma B., Sec., Occup. Educ.	2234	834-5338
300 Poe, Box 7801; 716 Mills St., 27608		
Hardy, Mark, Grnhse. Wkr., Hort. Sci.	2685	834-5338
Hort. Sci. Grnhse., Box 7609; 716 Mills St., 27608		
Hare, Dr. Thomas M., (Bonnie), Res. Assoc., Mat. Engr.	3419	851-1603
1233 Burlington, Box 7907; 216 Singleton St., 27606		
Hargis, Brenda J., (Jerry), Budg. Clk., Soc. & Anth.	3180, 2702	639-2769
309 1911 Bldg., Box 8107; Rt. 2, Angier 27501		
Hargrave, Dr. Harry A., Assoc. Prof., Engl.	3854	787-2018
G128 Tompkins, Box 8105; 643 Wimbleton Dr., 27609		

Name, Title, Department and Address	Office Phone	Resid. Phone
Harkins, Leon H., Assoc. Prof., Spec., Ext. For. Resou. 3028E Biltmore, Box 8003; 12508 Holly Springs Rd., Apex 27502	3386	362-1406
Harkins, Mary W., Supv., Admis., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 1307 Filmore St., 27605	829-4200	834-1737
Harmon, Frank, (Mary), Assoc. Prof., Arch. 316-A Brooks, Box 7701; 305 Calvin Rd., 27605	2203	833-2531
Harper, Charles R., (Linda), Agri'l. Res. Tech., Plant Path. 3409 Gardner, Box 7616; Rt. 2, Box 485, Knightdale 27545	2751	266-1894
Harper, Dr. Charles W., Assoc. Prof., Curr. & Instr. 408-A Poe, Box 7801; 1404 Varsity Dr., 27606	3221	834-3797
Harper, Linda W., (Charles), Clk.-Typ., Ec. & Bus. 202 Patterson, Box 8109; Rt. 2, Box 485, Knightdale 27545	3273	266-1894
Harper, Sandra M., Electronics Tech., Comp. Ctr. 124 Hillsborough Bldg., Box 7109; 2427-H Wycliff Rd., 27607	2517	781-8297
Harr, Paula B., Lab. Mgr., NCDHIA Dairy Lab., Ani. Sci. 110 Leazar, Box 7621; 5707 Forest Lawn Dr., 27612	2822	787-9365
Harrell, Carol, Purch. Asst., Purch. & Stores 218 Alumni, Box 7212; 100-A Butterwood Ct., Cary 27511	2171	469-1366
Harrell, Carol L., (Bill), Sec., Agri'l. Ext. Serv. 301 Ricks, Box 7602; 6016 Bellow St., 27609	2380	847-4028
Harrell, Daniel E., (Jean), Dir., Engr. Ext. Educ., IES 203-A Page, Box 7902; 4601 Pitt St., 27609	2356	781-4747
Harrell, Sherlyn E., Admn. Sec., Agri'l. Res. Serv., SALS 100-E Patterson, Box 7601; 221 East Wind Lane, Cary 27511	2718	851-0656
Harrington, Julia W., (Richard), Data Entry Oper., SSS SSS, Box 7224; Rt. 1, Box 138-B, Angier 27501	2161	639-6779
Harrington, Peggy L., (Henry C.), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 210 Harper St., Garner 27529	3323	772-6457
Harrington, Dr. Walter J., (Hazel), Prof. Emer., Math. 3010 Ruffin St., 27607		833-1065
Harrington, Walter L., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 117 S. Boylan Ave., 27603	3323	834-5060
Harris, Connie M., Lect., Engl. 275 Tompkins, Box 8105; 3109-C Aileen Dr., 27606	3863	851-8534
Harris, Curtis G., (Marie), Warehse. Mgr., Chem. 314 Dabney, Box 8204; 4217 Pin Oak Rd., 27604	2547	833-5905
Harris, Cynthia J., Dir., Upward Bound Proj., Stu. Aff./Upward Bound Proj. 205 Peele, Box 7317; 1320 S. Bloodworth St., 27601	3632	828-7308
Harris, Dwight, Res. Engr., Bio. & Agri'l. Engr. 119 Weaver Lab., Box 7625; 5108 Monk Dr., 27603	3101	772-5986
Harris, Edd P., (Joan), Elec. Tech., Bio. & Agri'l. Engr. 123-A Weaver, Box 7625; 8401 Camellia St., 27603	3101	772-1047
Harris, Edwin F., Jr., (Susan Arrendell), Univ. Arch. & Dir., Campus Plan. & Const. 219 Oberlin Rd., Box 7216; 222 Hawthorne Rd., 27605	2121	828-6783
Harris, Elaine B., Sec., Phys. Educ. 2001 Carmichael, Box 8111; 1014 Northview Dr., Sanford 27330	3361	776-9253
Harris, George, Maint. Mech. Phys. Plant Armory Shop, Box 7219	3080	
Harris, Harold R., (Martha), Mech., Univ. Res. Unit 1 4616 Reedy Creek Rd., Box 7601; 1821 Sunview St., 27610	2713	832-0223
Harris, Harwell H., Prof. Emer., Design 122 Cox Ave., 27605		833-0624
Harris, Dr. James R., (Elena), Prof., Poul. Sci. Ext. 214 Scott, Box 7608; 3806 Lassiter Mill Rd., 27609	2621	787-3494
Harris, John H., (Rachel), Ext. Prof. Emer., Hort. Sci. 3214 Birnamwood Rd., 27607		787-6222
Harris, Kenneth L., (Gladys), Hskp. Supv., Phys. Plant Park Shops, Box 7219; 1912 Bates St., 27610	3323	834-6818
Harris, Kimberly S., Clk.-Typ., Food Ani. & Equ. Med., SVM 4700 Hillsborough St., Box 8401; Rt. 2, 105 Beech Cove, Youngsville 27596	829-4200	
Harris, Lee J., (Nette), HVAC Supv., Phys. Plant Armory Shop, Box 7219; 902 Powell Dr., Garner 27529	3080	772-4165

Name, Title, Department and Address	Office Phone	Resid. Phone
Harris, Patsy E., Sales Clk.	2161	552-3061
SSS, Box 7224; 101 Hillcrest Circle, Fuquay-Varina 27526		
Harris, Ralton J., (Reba), Environ. Health Physicist, Rad. Prot.	2894	853-3582
214 Clark, Box 7108; Rt. 6, Box 267, Louisburg 27549		
Harris, Tara J., Data Proc. Asst., Prov. Off.	2193	772-7158
202 Holladay, Box 7101; 1908 Spring Dr., Garner 27529		
Harris, Dr. William C., Prof., Hist.	2484	847-0997
105 Harrelson, Box 8108; 6516 Brookhollow Dr., 27609		
Harrison, Dr. Antony H., (Linda), Assoc. Prof., Engl.	3870	851-1523
270 Tompkins, Box 8105; 108 Springbrook Pl., 27511		
Harrison, Gail C., (Donnie), Sec., Phys. & Math. Sci.	7833	772-2431
122 Cox, Box 8201; Rt. 10, Box 104, 27603		
Harrison, Henry Theodore, Jr., Prof.-Dir., UNC Ctr. for Public TV	2853	
211 TV Ctr., Box 8601		
Harrison, Mary Y., (Lorenzo), Analyst Programmer, Admn. Comp. Serv.	2794	772-0400
B-21 Hillsborough Bldg., Box 7209; 217 New Rand Rd., Garner 27529		
Harrold, Mary Ellen, (Isaac), Sec., Merit Awards Prog.	3671	839-0732
205 Peele, Box 7302; 3806 Burt Dr., 27606		
Hart, Dr. C. Arthur, Prof., Wood & Paper Sci.	3181	851-2393
1022E Biltmore, Box 8005; 3204 Tanager St., 27606		
Hart, Eleanor, (Frank), Admn. Sec., Agri'l. Res. Serv.	2717	467-2358
100 Patterson, Box 7601; 101 Abram Dr., Cary 27511		
Hart, Dr. Franklin D., (Eleanor), Vice Chan., Res., Res. Admin.	2117	467-2358
103 Holladay, Box 7003; 101 Abram Dr. Cary 27511		
Hart, Kathy, Comm. Dir., UNC Sea Grant	2454	
105 1911 Bldg., Box 8605; 2412 Trinity Farms Rd., 27607		
Hartman, Jeanie N., (Kerrick), Libr. Tech. Asst., For., Acid Depos. Prog.	3520	779-1867
1509 Varsity Dr., Box 7632; 1406 Kelly Rd., Garner 27529		
Hartman, Kerrick M., (Jeanie), Res. Asst., Plant Path.	3488	779-1867
2420 Gardner, Box 7616; 1406 Kelly Rd., Garner 27529		
Hartsfield, Bobby L., Elect., Phys. Plant	3080	839-8137
Armory Shop, Box 7219; 528 East Jones St. Apt. 3, 27601		
Hartwig, Ingrid, Vis. Lect., For. Lang.	2475	851-5339
128 1911 Bldg., Box 8106; 1700 Medfield Rd., 27607		
Hartwig, Dr. Robert E., Prof., Math.	2386	851-5339
332 Harrelson, Box 8205; 1700 Medfield Rd., 27607		
Harvell, Timothy F., (Pat), Instru. Mkr., Physics	2508	552-3767
7 Cox, Box 8202; Rt. 4, Box 159, Fuquay-Varina 27526		
Harvey, Frances M., Food Serv. Asst., Univ. Dining	3963	897-5808
Dining Hall, Box 7307; P.O. Box 28, Coats		
Harvey, Dr. Paul H., (Ethel), WNR Prof. Emer., Crop Sci.	2827	787-6054
3709 Hillsborough St., Box 8604; 1311 Mayfair Rd., 27608		
Harvey, Dr. Raymond W., (Charlotte), Prof., Ani. Sci.	2763	787-3065
220F Polk, Box 7621; Rt. 8, Box 182, 27612		
Harvey, Dr. William B., (Brenda), Assoc. Prof., Educ. Ldrshp. & Prog. Eval.	3127	782-0653
608 Poe, Box 7801; 3112 Crandon Lane, 27609		
Hash, Louise H., (Thomas), Sec., For. Lang.	2475	851-4900
118 1911 Bldg., Box 8106; 5302 Olive Rd., 27606		
Haskin, Wayne E., Asst. Prof., Engl.	3854	828-9465
G-105-A Tompkins, Box 8105; 812 Fairall Dr., 27607		
Haskins, Walter F., (Betty), Res. Analyst, Weed Sci.	2867	847-1990
3123 Ligon St., Box 7627; 205 Carriage Tr., 27614		
Hassan, Dr. Awatif E., Prof., For.	2891	782-7577
3024-C Biltmore, Box 8002; 3513 Morningside Dr., 27607		
Hassan, Dr. Hassan A., (Nabila), Prof., Mech. & Aero. Engr.	2365	787-1806
4215 Broughton, Box 7910; 4407 Gates St., 27609		
Hassan, Dr. Hosni M., Prof., Food Sci. & Microb.	2971	851-6014
339 Schaub, Box 7624; 1309 Swallow Dr., 27606		
Hassler, Dr. Francis J., (Oneta), Head, Bio. & Agri'l. Engr.	2694	834-3257
100 Weaver, Box 7625; 1404 Eden Ln.		
Hassler, Dr. William W., (Helen), Emer. Prof., Zool.		834-1445
Box 7617; 14 Bagwell Ave., 27607		

Name, Title, Department and Address	Office Phone	Resid. Phone
Hastings, Dr. Felton L., (Betty), Adj. Prof., Ent. Forestry Sciences Lab., Box 12254; 111 Dublin Rd., Cary 27511	541-4212	467-6075
Hatch, Patsy A., Agri'l. Res. Tech., Crop Sci. 1119 Williams, Box 7620; 5023 Wickham Rd., 27606	2657	851-0910
Hatch, Richard W., Pub. Aff. Prod., UNC Ctr. for Pub. TV 204 TV Ctr., Box 8601; 1408 Granada Dr., 27612	2853	782-2546
Hatcher, Alice J., (Mark), Analyst Prog., For. 1019 Biltmore, Box 8002; 4113 Balsam Dr., 27612	3168	781-4912
Hatchett, Dr. Stephen A., (Joanne), Asst. Prof., Ec. & Bus. 18-B Patterson; 1505 Delmont Dr., 27606	2258	851-2695
Hauser, Dr. Edwin W., (Julia), Adj. Assoc. Prof., Civil Engr. 208 Mann, Box 7908; 4810 Hollyridge Dr., 27612	2331	782-7896
Hauser, Dr. John R., (Ann), Prof., Elec. & Comp. Engr. 432B Daniels, Box 7911; 6800 Phillip Ct., 27607	2336	851-1477
Haven, Grace A., Clk.-Typ., Ent. Ext. Grinnells, Box 7626; 3500 Carriage Dr., 27612	3140, 3183	782-3500
Havner, Dr. Kerry S., (Roberta), Prof., Civil Engr. 201 Mann, Box 7908; 3331 Thomas Rd., 27607	2331	782-1103
Hawker, Mary E., (Ron), Clk.-Typ., Mar., Earth & Atmos. Sci. 214 Withers, Box 8208; 6924 Slade Hill Rd., 27609	3711	876-1284
Hawkins, Gail M., (Kerry), Bio. Lab. Tech., Crop Sci. 3127 Ligon St., Box 7631; 905-14 Shellbrook Ct., 27609	3905	782-1043
Hawkins, Dr. Gerald G., (Barbara), Assoc. Vice Chan., Stu. Aff. 210 Harris, Box 7316; 750-104 Washington St., 27605	3151	834-8764
Hawkins, Dr. Leo F., (Jean), Human Dev. Spec. & Ext. Prof., Agri'l. Ext. Serv. F-2 Ricks, Box 7605; 2624 Albemarle Ave., 27610	2770	833-4683
Hawks, Stirling N., Jr., (Thelma), Ext. Prof. Emer., Crop Sci. Ext. 3309 Mesa Ct., 27607		782-5164
Hawley, Jean W., (Ron), Acct. Clk., Phys. Plant 200-A Morris, Box 7219; 7513 Milestone Ct., 27619	2180	848-8091
Hayes, Arthur C., (Ida Mary), Prof. Emer., Text. Chem. 302 Brooks Ave., 27607		832-5472
Hayes, Fleming, Hskp. Asst., Phys. Plant Park Shops, Box 7219; 1218 Platinum Dr., 27610	3323	834-7031
Hayes, Janet S., (Mitchell), Res. Tech., Ent. 3709 Hillsborough St., Box 8604; 917 Ransdell Rd., Fuquay-Varina 27526	3391	552-4433
Hayes, Mitchell S., (Janet), Bio. Lab. Tech., Crop Sci. 3127 Ligon St., Box 7631; 917 Ransdell Rd., Fuquay-Varina 27526	3905	552-4433
Hayes, Richard A., Mdse./Mktg. Div. Mgr., SSS SSS, Box 7224; 214 Bramble Ct., 27609	2161	848-3055
Hayes, Theresa E., Psychologist, Counseling Ctr. 200 Harris, Box 7312	2423	
Hayes, Victor A., (Rita), Gen. Utility Wkr., Phys. Plant Sullivan Dr., Box 7219; Rt. 3, Box 388, Franklinton 27525	3408	494-7994
Hayes, William H., (Della M.), Hskp. Supv., Phys. Plant Park Shops, Box 7219; 300 Haywood St., Garner 27529	3323	772-7488
Haygood, Hillis E., Prof. AFROTC 145 Reynolds Coliseum, Box 7308; 1116 Brucemont Dr., Garner 27529	2417	851-0533
Hayne, Dr. Don W., (Harriet), Prof. Emer., Stat. & Zoo. 613 Cox, Box 8203; 312 Azalea Dr., Chapel Hill 27514	2531	933-8702
Haynes, Dr. Frank L., (Kathy), Prof. & Grad. Coord., Hort. Sci. 214 Kilgore, Box 7609; 5720 Winthrop Dr., 27612	3167	787-3147
Haynie, Dr. William J., III, (Glenda), Asst. Prof., Ind. Arts, Occup. Educ. 300-P Poe, Box 7801; 1000 Lakeside Dr., Garner 27529	2234	
Haywood, Dr. Charles A., (Frances), Assoc. Vice Chan., Stu. Aff. 209 Harris, Box 7316; 608 Delany Dr., 27610	3499	832-7944
Haywood, William E., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 7001 Poole Rd., Lot #90, 27610	3323	266-5473
Hazel, Dennis W., (Debbie), Res. Asst., For. 103 Enterprise St., Box 8006; 200 Ford Gates Dr., Garner 27529	3566	779-3227
Hazel, Robert B., (Kerma), Prof. & Spec., Spec., Ext. For. Resou. 3033A Biltmore, Box 8003; 305 Lakeside Dr., Garner 27529	3386	772-1393

Name, Title, Department and Address	Office Phone	Resid. Phone
Hazelwood, George D., (Carrie L.), Comp. Oper. Mgr., Comp. Ctr.	2517	
2620 Hillsborough Bldg., Box 7109; Rt. 3, Box 267, Louisburg 27549		
Hazen-Graham, Ronnie K., (William), Stu. Legal Advisor, Stu. Govt.	2797	967-4902
4130 Univ. Stu. Ctr., Box 7306; 231 Forest Hill Rd., Chapel Hill 27514		
Headen, Dr. Alvin E., Jr., (Sandra), Asst. Prof., Ec. & Bus.	3273	
201 Patterson, Box 8109		
Heagle, Dr. Allen S., (Janet), Prof., Plant. Path., USDA	3728	467-6895
3908 Inwood Rd., Unit 2, Box 7632; 1216 Scott Pl., Cary 27511		
Healy, Dr. Bridget E., Intern, Sm. Ani. Vet. Teach. Hosp., SVM	829-4200	
4700 Hillsborough St., Box 8401		
Heath, John, (Helen) Food Serv. Asst., Univ. Dining	3963	782-0053
Dining Hall, Box 7307		
Heath, Ralph C., (Martha), Adj. Prof., Civil Engr.	2331	782-0171
208 Mann, Box 7908; 4821 Kilkenny Pl., 27612		
Heaton, Jill B., (Randy), Vis. Lect., Speech-Comm.	2450	781-9562
203-A Winston, Box 8104; 4700 Connell Dr., 27612		
Hebert, Dr. Teddy T., (Nell), Prof. Emer., Plant Path.	2721	832-1226
2422 Gardner, Box 7616; 2703 Clark Ave., 27607		
Hebrank, Dr. John H., (Mary), Vis. Asst. Prof., Mech. & Aero. Engr.	2365	383-3190
3183 Broughton, Box 7910; 216 Jefferson Dr., Durham 27712		
Heck, Dr. Walter W., (Corrine), Prof., USDA-Bot.	3311	787-9058
1509 Varsity Dr., Box 7632; 3612 Browning Pl., 27609		
Heckendorn, Miles J., III, Capt., Dep. Dir., Admin., Public Safety	2156	
Field House, Box 7220		
Hedeen, Kevin M., Res. Tech., Anat., Physiol. Sci. & Radiol., SVM	829-4200	847-6905
4700 Hillsborough St., Box 8401; 8300 Dunwood Ct., 27612		
Hedges, Barbara, Ref. Librn., Libr.	2935	828-5692
1140 Library, Box 7111; 2300 Avent Ferry Rd., 27606		
Hedgpeith, Vickie S., (Daniel), Lab. Tech., Ani. Sci.	2504	848-9467
227 Polk, Box 7621; 7308 Ray Rd., 27612		
Hedrick, Karl H., (Jessie), Res. Tech., Ani. Sci.	2766	851-2047
241 Polk, Box 7621; 5709 Country Forest Rd., 27606		
Heeter, Kathleen A., Mgr., Pos. Mgt., Human Resou.	7175	
Admn. Serv. Ctr., Box 7210; 2012 St. Marys St., 27608		
Heggie, Cornelia D., Cook, Univ. Dining	3963	821-4367
Dining Hall, Box 7307; 1210 Carlton Ave., 27606		
Heggie, Gertha L., (Horace), Prog. Asst., Con. Educ. Professional Dev.	2261	821-7993
147 McKimmon, Box 7401; 3082-B Woods Pl., 27607		
Heidner, Hans, W., Res. Tech., Micro., Path. & Parasit., SVM	829-4368	782-7144
4700 Hillsborough St., Box 8401; 1226 Dixie Tr., 27607		
Height, Jackie N., Clk., Alumni Rel.	3375	872-2753
Alumni, Box 7503; 2800 Dove Ln., 27604		
Heimbach, Dr. Clinton L., (Alice), Assoc. Head, Undergrad. Prog., Civil Engr.	2331	787-5643
211 Mann, Box 7908; 3300 Redbud Ln., 27607		
Heinis, James J., Res. Analyst, Food Sci.	2965	
226 Schaub, Box 7624; 1900 Smallwood Dr., 27605		
Heller, Nancy F., (Ira), Asst. Dir., Career Plan. & Place.	2396	851-7578
28 Dabney, Box 7303; 107 Loch Bend Lane, Cary 27511		
Hembrick, Elsie H., Acct. Tech., Alumni Rel.	3375	828-2846
Alumni, Box 7503; 933 Cross Link Rd., 27610		
Hemby-Richardson, Jackie, Stock Clk., Phys. Educ.	3508	834-8614
1214 Carmichael, Box 8111; 3309 Cedar Springs Dr., 27603		
Hemingway, Margaret M., (Jack D., Sr.), Word Proc. Oper., SVM	829-4200	892-3698
4700 Hillsborough St., Box 8401; 905 W. Jones Dr., Dunn 28334		
Hemphill, LouGene S., (James W.), Acct. Clk., Dairy Rec. Proc. Ctr.	7828	851-4466
Leazar, Box 7623; 5006 Newcastle Rd., 27606		
Henderson, Christopher D., Plumber, Phys. Plant	3080	772-8200
Armory Shop, Box 7219; Rt. 1, Box 352, Apex 27502		
Henderson, Deborah J., (Joseph), Admn. Asst., Stu. Aff.	2446	851-7078
101 Holladay, Box 7301; 1609 Westbridge Ct., 27606		
Henderson, Johnny H., (Pat), Asst. Football Coach, Athl.	2616	
Weisiger-Brown Athl. Fac., Box 8502		

Name, Title, Department and Address	Office Phone	Resid. Phone
Henderson, Dr. Warren R., Assoc. Prof., Hort. Sci.	3167	847-5258
218 Kilgore, Box 7609; 2605 Sawmill Rd., 27612		
Hendren, Charmaine M., (Jim), Admn. Sec., Curr. & Inst.	3221	467-2829
402 Poe, Box 7801; 106 Bishop Ct., Cary 27511		
Hendricks, Joseph S., (Vena), Purch. Agt., Phys. Plant	2180	851-3995
200 Morris, Box 7219; 1013 Powell Dr., 27606		
Henkler, Edward S., (Diane), Instr., Lt., USN, Naval Sci.	2757	688-9165
104 Reynolds Coliseum, Box 7301; Durham 27701		
Henley, Twyla D., Patrol Off., Public Safety	3206	
Field House, Box 7220		
Hennessee, Glenn L., Lab. Supv., Chem.	2947	834-5451
720 Dabney, Box 8204; 610 Chappell Dr., 27606		
Hennessey, Lee H., Comp. Sys. Coord., Pers.	7929	
Admn. Serv. Ctr., Box 7210; 203 E. Ransom, Apt. 2-B, Fuquay-Varina 27526		
Henrikson, Dr. Charles K., (Pat), Asst. Prof., Anat., Physiol. Sci. & Radiol., SVM	829-4222	848-3046
4700 Hillsborough St., Box 8401; 8408 Wellsley Way, 27612		
Henry, Crawford I., Head Tennis Coach, Athl.	2493	755-1276
122 Reynolds Coliseum, Box 8501; 1911 Sunset Dr., 27608		
Henry, Dr. Edward T., (Roberta), Asst. Prof., Food Ani. & Equ. Med., SVM	829-4324	467-6705
4700 Hillsborough St., Box 8401; 112 Whitby Ct., Cary 27511		
Henry, Dr. Leslie T., Res. Assoc., Soil Sci.	2645	967-5434
4302 Williams, Box 7619; 61 Polks Landing Sta., Chapel Hill 27514		
Hentz, Dr. Forrest C., Jr., (Carole), Prof., Chem.	2546	467-6285
108B Dabney; 1410 N. Harrison Ave., Cary 27511		
Hepler, Cedric L., Ref. Librn., Libr.	2935	833-8069
1140 Library, Box 7111; 905 Hillsborough St., D2A, 27603		
Herakovich, Douglas E., Asst. Sports Info. Dir., Athl.	2102	851-8516
Case Athl. Ctr., Box 8501; 1903 Trexler Ct., 27606		
Herman, Dennis L., (Jeanne), Ani. Sci.	2773	467-7960
329 Polk, Box 7621; 1103 Warren Ave., Cary 27511		
Herman, Dr. Glenda M., (Philip), Ext. Housing Spec., Home Ec. Agri'l. Ext.	2770	781-2505
210 Ricks, Box 7605; 813 Davidson St., 27609		
Herman, L. Russell, Jr., Tech. Writer Comp. Ctr.	2517	834-2693
1303-A Library, Box 7109; 2624 Kilgore Ave., 27607		
Herman, Luther R., (Nan), Asst. Prof. Emer., Elec. Engr.	704-245-7428	
Rt. 4, Box 162, Rutherfordton 28139		
Herndl, Carl G., (Diane), Asst. Prof., Engl.	3863	942-3815
276 Tompkins, Box 8105; 224 Valley Park Ed., 13, Chapel Hill 27514		
Herrin, Kitty B., (Chuck), Soc. Res. Asst., Hum. & Soc. Sci.	3791	781-1492
221E Winston, Box 8101; 3737 Yorktown Pl., 27609		
Herring, Cathy M., Agri'l. Res. Tech., Gen.	2289	851-7112
2621 Gardner, Box 7614; 2126 Gorman St., 27606		
Herring, Ella L., Hskp. Supv., Phys. Plant	3323	
Park Shops, Box 7219		
Herring, Patricia B., (Bill), Sec., Phys. Plant	829-4217	663-2658
4700 Hillsborough St. Box 8401; 405 E. 4th St., Siler City 27344		
Hersh, Dr. Solomon P., (Rosalie), Prof. & Head, Text. Engr. & Sci.	3255	787-4364
103 Nelson, Box 8301; 2314 Weymouth Ct., 27612		
Hess, Dr. James D., (Frances), Assoc. Prof., Ec. & Bus.	3886	787-5794
219-G Hillsborough Bldg.; 4501 Old Village Rd., 27612		
Hess, Dr. Thomas M., (Erica), Asst. Prof., Psy.	2251	544-4100
754 Poe, Box 7801; 5901 Williamsburg Way, Durham 27713		
Hester, Grace, (Tom), Vis. Lect., For. Lang.	2475	846-8454
121 1911 Bldg., Box 8106; 6913 Valley Lake Dr., 27612		
Hester, Linda G., (Claud), Lab. Tech., Ani. Sci.	2769	779-0440
10 Polk, Box 7621; Rt. 2, Box E561C, 27610		
Hester, Dr. M. Thomas, (Grace), Dir., Univ. Honors Council, & Prof., Engl.	3870	846-8454
243 Tompkins, Box 8105; 6913 Valley Lake Dr., 27612		
Hester, Mary Frances, Assoc. Dir., McKimmon Ctr., Univ. Ext.	2277	832-4530
202 McKimmon, Box 7401; 1334 Oberlin Rd., 27608		

Name, Title, Department and Address	Office Phone	Resid. Phone
Hibbard, Thomas C., (Debra), Mech. Art., Univ. Graphics Sullivan Dr., Box 7226; 213 Winston Dr., Cary 27511	2131	469-0311
Hice, John D., (Teresa), Stat. Analyst, Urb. Aff. 280 McKimmon, Box 7401; 1115 Walnut St., Cary 27511	3211	469-3134
Hickman, Jack H., Analyst Prog., Mar., Earth & Atmos. Sci. 230 Withers, Box 8208; P. O. Box 5043, 27650	7839	851-5698
Hicks, Deborah, L., Analyst Programmer, Admn. Comp. Serv. B-21 Hillsborough Bldg., Box 7209	3541	832-3589
Hicks, Linda B., (John), Nurse Supv., Health Serv. Clark Inf., Box 7304; 504 Forest Ridge Rd., Garner 27529	2564	779-2589
Hicks, Nancye G., Recept. Off. Asst., SSS SSS, Box 7224	2161	
Hiday, Dr. Virginia A., (Lanny L.), Prof., Soc. & Anth. 310 1911 Bldg., Box 8107; 1426 Arboretum Dr., Chapel Hill 27514	3114	929-2631
High, Berkley O., Lab. Ani. Tech., Poul. Sci. Univ. Res. Farm #2, Box 7608; 1200½ S. East St.	2740	828-5366
High, Deseree B., (Ed), Acct. Clk., Acct. Pay. 213 Admn. Serv. Ctr., Box 7204; P. O. Box 1229, Wendell 27591	3497	
High, Walter M., III, (Karen), Head, Monographic Cat., Libr. 1121 Library, Box 7111; 36 Clover Dr., Chapel Hill 27514	2603	968-1468
Highfill, Dr. W. Lawrence, (Hilda), Assoc. Prof. Emer. of Rel., Rel., Phil. & Rel. Box 8103; 220 E. Park Dr., 27605	2477	833-6393
Hight, Durward, (Patricia), Welcome Ctr. Info., Trans. Box 7221; 3509 Leonard St., 27607	3424	787-5730
Hight, Patricia W., (Durward), NCDHIA Bus. Mgr., Ani. Sci. 111 Polk, Box 7621; 3509 Leonard St., 27607	2771	787-5730
Hill, Alleavious, Libr. Tech. Asst., Monographic Cat., Libr. 1121 Library, Box 7111; 3945D Marcom St., 27606	2603	
Hill, Betty, (Fredrick), Sec., Ec. & Bus. 10 Patterson, Box 8109; 6005 Tarnhour Ct., 27612	2605	847-1538
Hill, Bill H., (Betty), Agri'l. Res. Tech., Crop Sci. 1236 Williams, Box 7620; 202 Compton St., Clayton 27520	2704	553-7075
Hill, Dr. Charles H., (Jeanne), WNR Prof., Poul. Sci. Dearstyne Avian Res. Ctr., Box 7608; 1304 Lorimer Rd., 27606	2692	851-2090
Hill, (CPT) Dale R., (Patricia), APMS, Mil. Sci. 154 Reynolds Coliseum, Box 7309; 6400 Secret Dr., 27612	2428	848-7789
Hill, Gail H., (Jerry), Clk., Univ. Cash. & Stu. Accts. 2 Peele, Box 7213; 414-1 Buck Jones Rd., 27606	2986	851-5197
Hill, Dr. Gary D., Asst. Prof., Soc. & Anth. 317 1911 Bldg., Box 8107; 224 N. East St., 27601	3114	821-2964
Hill, Grady H., (Jessie P.), Locksmith Supv., Phys. Plant 11 Park Shops, Box 7219; 326 John St., Clayton 27520	3323	553-7721
Hill, Louvenia T., Clk.-Typ., Univ. Stu. Ctr. 1202-B Univ. Stu. Ctr., Box 7306; 1217-B Sawyer Court, 27610	3900	
Hill, Patrice A., (Kevin), Admn. Asst., Fin. & Bus. B Holladay, Box 7201; 300 Paprika Ct., 27614	2732	848-3011
Hill, Thomas A., (Joyce), Instr. Shop Supv., Physics 7 Cox, Box 8202; 424 Bashford Rd., 27606	2508	851-3571
Hill, Wandra P., Coord., Minority Stu. Aff., and Coord., Coop. Educ. Prog., PAMS Phys. & Math. Sci. 121 Cox, Box 8201	7841	
Hilley, Dr. Harvey D., (Lori), Assoc. Prof., Food Ani. & Equ. Med., SVM 4700 Hillsborough St., Box 8401; 613 A Bashford Rd., 27606	829-4294	851-7327
Hilliard, Garland K., (Marie), Lect. & Coord., Graphic Comm./Occup. Educ. 510-N Poe, Box 7801; 1427 Brooks Ave., 27607	2234	787-2522
Hilliard, Thomas L., Hskp. Asst., Phys. Plant Park Shops, Box 7219	3323	
Hillmann, Dr. Ruediger C., (Julia), Assoc. Prof., Ent. 3310 Gardner, Box 7613; R.D. 1, Box 273, Apex 27502	2703	772-3134
Hillsgrove, Patricia M., (Steven R.), Prog. Asst., Con. Educ. 145 McKimmon, Box 7401; 104 Glenbuckley, Cary 27511	2261	467-3180

Name, Title, Department and Address	Office Phone	Resid. Phone
Hillsgrove, Steven R., Drafting Tech., Bio. & Agri'l. Engr.	2675	467-3180
201 Weaver, Box 7625; 104 Glenbuckley, Cary 27511		
Hine, Bonnie G., (Jason D.), Mgr., Bus. Serv., Comp. Ctr.	2517	787-8697
B16-B Hillsborough Bldg., Box 7109; 732 Currituck Dr., 27609		
Hines, Alfred J., Main. Mech., Phys. Plant Park Shops, Box 7219	3323	
Hines, Gayle F., (Ricky), Admn. Asst., Grad. Sch. 108 Peele, Box 7102; 1402 Claymore Dr., Garner 27529	7461	772-2383
Hines, Gerald, Laborer, Phys. Plant 18 Riddick Stad., Box 7219; 5512 Dunn Rd., 27545	3479	266-2707
Hines, James L., (Carolyn S.), Hskp. Supv., Phys. Plant Park Shops, Box 7219; 773 Lunar Dr., 27610	3323	828-7013
Hines, Mary T., Mail Clk., Mail Rm. G-210 Library, Box 7111; 1900 Hadley Rd., 27610	2170	828-7145
Hines, Miriam, Sec., Phys. Plant Sullivan Dr., Box 7219; Timberlake Apts. 3045 F, 27604	3408	872-6693
Hines, Nathaniel L., Acct., Contr. & Grants Leazar, Lower Level, Box 7214; 531 N. Blount St., 27604	2153	832-1953
Hines, Ronald L., (Barbara), Lab. Mgr., Ent. 2319 Gardner, Box 7613; 117 Fern Forest Dr., 27603	2620	779-0884
Hines, Sue F., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 3412 Smithfield Rd., Knightdale 27545	3323	
Hinesley, Dr. L. Eric, Assoc. Prof., Hort. Sci. 234 Kilgore, Box 7609; 1410 Spring Dr., Garner 27529	3132	779-0661
Hink, Howard A., (Sylvia), Asst. to the Athl. Dir., Athl. Case Athl. Ctr., Box 8501; 206 Shoals Ln., Garner 27529	2101	779-6356
Hinnant, Charles D., (Carolyn), Res. Tech., Crop Sci. Ext. 1239 Williams, Box 7620; 907 Park Ave., Garner 27529	3633	772-0364
Hinnant, Hugh L., (Nancy), Grnhse. Mgr., Plant Path. 840 Method Rd., Unit I, Box 7628; Rt. 1, Box 103, Apex 27502	2611	772-3282
Hinnant, Jimmy M., (Kathleen), Agri'l. Res. Asst., Poul. Sci. Univ. Res. Farm 6, Box 7608; Rt. 1, Wendell 27591	3921	365-7974
Hinnant, Lynda H., (Jim), Cash Control Supv., SSS SSS, Box 7224; 5305 Amsterdam Pl., 27606	2161	362-8400
Hinshaw, Dr. Jeffrey M., (Barbara), Asst. Prof., Ext. Spec., Zool. 2016 Fanning Bridge Rd., Fletcher 28732, Box 7617; 1705 Fairview Rd., 27608	704-684-3562	834-9440
Hinson, Dr. Thelma L., Ext. Prof. & Spec., Fam. Resou. Mgmt., Agri'l. Ext. F-2 Ricks, Box 7605; 900 Curtis Dr., Garner 27529	2770	772-6567
Hinton, Charlotte C., (W. N.), Sec., Agri'l. Ext. 107 Ricks, Box 7605; 2011 Englewood Dr., Rt. 1, Apex, 27502	2781	772-3552
Hinton, Cornelius N., Stock Clk., SVM 4700 Hillsborough St., Box 8401; 721 Dorothea Dr., Apt. A, 27603	829-4200	831-9213
Hinton, Darcel, Sec., Soc. & Anth. 333 1911 Bldg., Box 8107; 2821 Club Plaza Rd., 27603	3291	821-1575
Hinton, David, Hskp. Asst., Phys. Plant Park Shops, Box 7219; 511 S. Swain St., 27610	3323	832-2962
Hinton, Earnest J., Pressman, Univ. Graphics Sullivan Dr., Box 7226; 613 Church Rd., 27603	2131	772-6149
Hinton, Gene R., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 5116 Royal Acres Rd., 27610	3323	
Hinton, Lenelter S., (James), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 2504 Baney Court, 27610	3323	828-5693
Hinton, Mildred V., Supply Clk., Admn. Off. G-210 Library, Box 7111; 1509-A Burgundy St., 27610	2595	833-8121
Hinton, Reginia, Hskp. Supv., Phys. Plant Park Shops, 2520 Old Garner Rd., #84, 27610	3323	833-4860
Hinton, Rosa M., Asst. Dir., Fin. Aid 213 Peele, Box 7302; Rt. 7, Box 10, Apex 27502	2421	362-5536
Hinton, Vicki E., Acct. Tech., Contr. & Grants Leazar, Box 7214	2153	
Hinton, Willie E., Gen. Utility Wkr., Phys. Plant Sullivan Dr., Box 7219; 1433 E. Lane St., 27610	3408	755-2091

Name, Title, Department and Address	Office Phone	Resid. Phone
Hisada, Alice M., (Juan), Lab. Res. Spec., Plant Path. Ext. 1300 Gardner, Box 7616; 6101 Trinity Rd., 27607	3619	851-1528
Hitchcock, Anne W., Ins. & Risk Mgr., Purch. & Stores Alumni, Box 7212	2171	
Hitchcock, Cynthia, (Lewis), Comp. Oper., Oper. Hillsborough Bldg., Box 7109; Rt. 1, 119 Nicklaus Dr., Garner 27529	2523	772-7008
Hitchings, Robert G., (Frances), Prof., Wood & Paper Sci. 2106 Biltmore, Box 8005; 3427 Redbud Ln., 27607	2888	787-6744
Hoadley, Dr. George B., (Mary), Prof. Emer., Elec. & Comp. Engr. Box 7911; 3213 Leonard St., 27607		787-6871
Hoag, Dr. Dana L., (Laura), Asst. Prof., Ec. & Bus. 207-D Hillsborough Bldg.; 4616 Hunters Creek Ln., 27606	3881	851-6064
Hobbs, Jane H., (Curtis), Acct. Tech., Agri'l. Res. Admn. 120 Patterson, Box 7601; 3939 Glenwood Ave., Apt. 655, 27612	2714	
Hobbs, Dr. Joseph P., (Faye), Prof., Hist. 103 Harrelson, Box 8108; 3211 Ruffin St., 27606	2483	
Hobbs, Larry L., Agri'l. Res. Tech., Bot. 4213 Gardner, Box 7612; P. O. Box 33331, 27606	3570	821-2303
Hobbs, Richard W., Patrol Off., Public Safety Field House, Box 7220	3206	
Hobbs, Winifred R., (Dennis), Res. Tech., Ent. B1104 Grinnells, Box 7626; 328 Latimer Rd., 27609	3804	787-3314
Hobby, Doris B., (Sherill), Clk., Motor Pool Sullivan Dr., Box 7219; Rt. 3, Box 344-F, 27603	2179	772-1926
Hobby, Gwen S., Sec., Ani. Sci. 319 Polk, Box 7621	2773	772-7261
Hobby, Sally J., (Gerald), Admn. Asst., Phys. & Math. Sci. 120 Cox, Box 8201; 1309 Frederick Rd., Garner 27529	7277	772-4095
Hobgood, Dr. Thomas N., Jr., (Miriam), Dist. Ext. Chm. & Prof., Ext. Soc., Agri'l. Ext. Serv. 307 Ricks, Box 7604; 5612 Deblyn Ave., 27612	2780	787-8426
Hobson, Linden R., Sec., Ani. Sci. 119 Polk, Box 7621	2761	
Hoch, Arthur M., (Phyllis), Assoc. Prof. Emer., Phys. Educ. 6329 Lakeland Dr., 27612		848-8570
Hockenberger, Terri, (Robert), Acct. Clk., Phys. Sci. Res. 115 Cox, Box 8201; 708 Compton Rd., 27609	7047	787-1967
Hocutt, Barbara R., (William), Sec., Adult & Comm. Coll. Educ. 120 Ricks, Box 7607; 4817 Glen Forest Dr., 27612	2707	781-7194
Hocutt, Elaine F., (Reggie), Sec., Engl. 246 Tompkins, Box 8105; 9149 Sauls Rd., 27603	3870	779-3032
Hocutt, Roger R., Mach. Oper., Phys. Plant Armory Shop, Box 7219; Rt. 1, Box 460, Selma 27576	3080	965-3568
Hodge, Diana B., Acct. Tech., Fund. Acct. 214 Admn. Serv. Ctr., Box 7203; Rt. 3, Box 232-AB, Zebulon 27597	2149	269-9443
Hodge, Gladys G., Hskp. Asst., Phys. Plant Park Shops, Box 7219; Rt. 3, Box 265, Spring Hope 27882	3323	478-3722
Hodge, Jane E., Facil. Coord., McKimmon Ctr. 139 McKimmon, Box 7401; 2709 Peachtree St., 27608	2277	782-0239
Hodge, Winifred M., (Bob), Admn. Mgr., Design 200-C Brooks, Box 7701; 3301 Octavia St., 27606	2202	851-5608
Hodges, Elizabeth, (Larry), Vis. Lect., Comp. Sci. 242E Daniels, Box 8206; 5524 Pamela Dr., 27603	7890	779-3685
Hodges, Dr. Larry F., (Elizabeth), Instr., Comp. Sci. 242-B Daniels, Box 8206; 5524 Pamela Dr., 27603	7885	779-3685
Hodgson, Dr. Ernest, (Mary K.), WNR Prof., Ent. Unit 4, Method, Box 7633; 3317 Cheswick Dr., 27609	2274	782-2158
Hodgson, Dr. Thomas H., (Grace), Prof., Mech. & Aero. Engr. 328 Riddick, Box 7906; 128 Perquimans Dr., 27609	2362	781-2983
Hodson, Dr. Ronald G., (Ruthie), Asst. Prof. & Assoc. Dir., Sea Grant Prog., UNC Sea Grant 105 1911 Bldg., Box 8605; 1012 N. Salem, Apex 27502	2454	362-7840
Hoeppner, Pamela W., (Kevin), Sec., Educ. Ldrship. Prog. Eval. 608 Poe, Box 7801; 105 W. Bridgestone Ct., Fuquay-Varina 27526	3127	552-9874

Name, Title, Department and Address	Office Phone	Resid. Phone
Hoffman, Dr. Karon L., Resid. Lg. Ani. Int. Med., SVM 4700 Hillsborough St., Box 8401	829-4200	
Hoffman, Dr. Robert L., Assoc. Prof., Univ. Stud. 138 Harrelson, Box 7107; 5816 Meadowlark Ln., 27610	2479, 2470	828-5363
Hoffmann, Dr. Rosemary B., Vis. Lect., For. Lang. & Lit. 135 1911 Bldg., Box 8106; 1710 Benehan St., 27605	2475	834-6143
Hogarth, Brenda W., Res. Tech., Ani. Sci. 209 Polk, Box 7621; 209 Peele Pl., 27610	2763	833-0100
Hoggard, Frances G., (David G.), Payr. Clk., Payr. & Ben. Admn. Serv. Ctr., Box 7215; 1208 Mitchell St., 27607	2151	787-0836
Hogge, Lemuel C., Agri'l. Res. Tech., Soil Sci. 3205 Williams, Box 7619; 5009 Winterlochen Rd., 27603	2388	772-5167
Holaneck, Ronald M., Comp. Programmer, Ec. & Bus. Hillsborough Bldg., Box 8110; 5804 Apt. C Falls Neuse Rd., 27609	3041	878-8723
Holden, D. Ann, (Wade), Proofreader, Univ. Graphics Sullivan Dr., Box 7226; Box 352, Youngsville 27596	2131	556-4308
Holder, Geraldine B., Admn. Sec., Food Ani. & Equ. Med., SVM 4700 Hillsborough St., Box 8401; 3009 Farrior Rd., 27607	829-4240	
Holder, Luther H., Hskp. Asst., Phys. Plant Park Shops, Box 7219	3323	
Holderfield, David F., Press. Supv., Univ. Graphics Sullivan Dr., Box 7226; 2808 Dove Ln., 27604	2131	872-2145
Holladay, Steven D., (Susan), Anat. Lab. Mgr., SVM 4700 Hillsborough St., Box 8401; 4700 Rampart St. 27609	829-4200	782-8023
Holland, Anne P., (Henry), Admn. Asst., Development 12 Holladay, Box 7501; 600 Tiffany Circle, Garner 27529	2846	779-7210
Holland, Barbara, Admn. Sec., Ec. & Bus. 201-A Patterson, Box 8109; 512 Lakeside Dr., Garner 27529	3273	772-1327
Holland, Frances D., (Frankie), Admn. Asst., Elec. & Comp. Engr. 233 Daniels, Box 7911; Rt. 1, Box 104, Morrisville 27560	2336	362-6156
Holland, James H., Programmer, Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 6324 Wildlife Rd., Sanford 27330	829-4215	776-8686
Holland, Martha B., Admn. Sec., For. 2023 Biltmore, Box 8002; 311 Shepherd St., 27607	3674	832-2556
Holleman, Brenda S., Asst. Area Dir., Resid. Life 7315 Harris, 27695-7315	3605, 2406	737-6502
Holleman, Lee, Jr., (Bet), Elect., Phys. Plant Armory Shop, Box 7219; Box 246, Holly Springs 27540	3080	552-5039
Holler, Dr. William M., Assoc. Prof., For. Lang. 121 1911 Bldg., Box 8106; 407 W. Park Dr., 27605	2475	834-2138
Holley, Dr. D. Lester, (Linda), Prof., For. 2018-C Biltmore, Box 8002; 515 Gardner St., 27607	2891	833-9229
Holley, Dr. Linda T., (Lester), Assoc. Prof., Engl. 211 Tompkins, Box 8105; 515 Gardner St., 27607	3863	833-9229
Holley, Roy L., (Odelle), Budg. Dir., Fin. 206 Holladay, Box 7206; 1905 Hillock Dr., 27612	2175	787-1426
Holliday, Gene A., (Jessie Ruth), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 500 Camel St., Clayton 27520	3323	553-4955
Holljes, H. Christian, (Lauren), Coord. Inst. Mat., Prod. Ctr., Educ. 511 Poe, Box 7801; 2505 Everett Ave., 27607	3054	833-9232
Holloman, Carol M., (Robert), Acct. Clk., Comp. Sci. 122 Daniels, Box 8206; 135 Innsbruck Dr., Clayton 27520	2930	553-5455
Holloman, William T., Coord., Engr. Co-Op. 115 Page; 331-F Oak Run Dr., 27606	2300	851-2092
Holloway, Bobby F., (Frances), Pers. Supv., Phys. Plant 1204-C Morris, Box 7219; P.O. Box 203, Bunn 27508	2180	
Holloway, Dr. Karla F.C., (Russell), Assoc. Prof., Engl. 201 Tompkins, Box 8105	3863	
Hollowell, Franklin L., (Susan), Agri'l. Res. Tech., Ani. Sci. 203-A Polk, Box 7621; P.O. Box 2657, Durham 27705	2566	732-7488
Hollowell, Joyce E., Agri'l. Res. Tech., Plant Path. 115 Tob. Hdhs-Gardner, Box 7616; 711 Elmwood Dr., 27603	3306	772-7987
Hollowell, Marvin E., (Carrie), Dist. Ext. Chm. Emer., Agri'l. Ext. Serv. 3012 Randolph Dr., 27609		787-1468

Name, Title, Department and Address	Office Phone	Resid. Phone
Holman, Jan, (Earl), Sec., Ec. & Bus.	2258	787-8921
18 Patterson, Box 8109; 922 Wimbleton Dr., 27609		
Holmes, Doris B., (John A.), Clk., Admis.	2433	772-4649
107 Peele, Box 7103; 307 Loop Rd., Garner 27529		
Holmes, Janice F., Laun. Wkr., Laundry	2122	639-6775
Yarbrough Dr., Box 7218; Rt. 1, Box 156, Angier 27601		
Holmes, Kathleen O., Res. Tech., Comp. Ani. & Species Med., SVM	829-4376	
4700 Hillsborough St., Box 8401		
Holmes, Sidney F., Jr., (Linda), Sys. Analyst, Admn. Comp. Serv.	3640	821-0395
1212 Blue Ridge Rd., Box 7227; 421 Oak Run Dr., 27606		
Holt, Dee A., Sec., Ext. 4-H & Youth Dev.	3242	821-0850
207 Ricks, Box 7606; 515 Washington St., Apt. #1, 27605		
Holt, Marie L., (Joe), Admn. Asst., Agri. & Life Sci.	3248	362-6474
107 Patterson, Box 7601; 913 Laura Duncan Rd., Apex 27502		
Holt, Nancy C., Data Entry Oper., Dairy Rec. Proc. Ctr.	2075	266-5362
Leazar, Box 7623; 6901 Buffalo Rd., Box 190, 27604		
Holthausen, Dr. Duncan M., Jr., (Virginia), Prof., Ec. & Bus.	2256	851-2328
209-D Patterson, Box 8109; 1501 Princess Anne Dr., 27607		
Holton, Barry L., (Joyce), Telecomm. Analyst, Urb. Aff.	2578	266-9745
262 McKimmon, Box 7401; 105 Meadows Cir., Knightdale 27545		
Holtzman, Dr. Abraham, (Sylvia), Prof., Pol. Sci. & Pub. Admin.	2481	787-2494
224 Link Bldg., Box 8102; 3606 Alamance St., 27609		
Homan, Monica D., Mar., Earth & Atmos. Sci.	7927	848-1563
228E Withers. Box 8208; 7008 Valley Dr., 27612		
Honeyblue, Gerald M., Safety Inspector, Public Safety	7915	
Field House, Box 7220		
Honeycutt, Fred E., Comp. Sys. Coord., Admn. Comp. Serv.	2459	772-7722
12 Peele, Box 7208; 702 Lakeside Rd., Garner 27529		
Honeycutt, Gladys M., Libr. Asst., Reserve Rm.	2597	556-4089
1320 Library, Box 7111; Rt. 1, 137 Martinhill Dr., Youngsville 27596		
Honeycutt, Dr. Thomas L., (Jonna), Assoc. Prof. & Assoc. Dept. Head, Comp. Sci.	7001	787-6226
122-D Daniels, Box 8206; 4505-D Edwards Mill Rd., 27612		
Honour, Ella B., (Ralph), Clk.-Typ., USDA-ARS	2731	876-1962
51 Kilgore, Box 7610; 3111 Timberlake Dr., 27604		
Hood, Margaret M., (Richard), Sec., Home Econ., Agri'l Ext. Serv.	2782	467-5030
103 Ricks, Box 7605; 500 Farmington Woods Dr., Cary 27511		
Hood, Mary E., Hskp. Asst., Phys. Plant	3323	
Park Shops, Box 7219		
Hooker Dr. Deborah A., (Will), Typ., Psy.	2254	821-5629
714 Poe, Box 7801; 619 Brooks Ave., 27607		
Hooker, Ida L., Hskp. Asst., Phys. Plant	3323	
Park Shops, Box 7219		
Hooker, Melvin L., (Lucille), Lab. Tech., Bio. & Agri'l. Engr.	3101	833-0808
134 Weaver, Box 7625; 2401 Ellerbe Ln., 27610		
Hooker, Will E., (DeeDee), Assoc. Prof., Hort. Sci.	3132	821-5629
156 Kilgore, Box 7609; 619 Brooks Ave., 27607		
Hoopes, Dr. Paul "Jack" Vis. Asst. Prof., Anat., Physiol. Sci. & Radiol., SVM	829-4292	783-5239
4700 Hillsborough St., Box 8401; 2831 Edridge Ct. #201, 27612		
Hoover, Ann M., Libr. Asst., Ser. Proc.	7021	821-5516
G-116 Library, Box 7111; 2015 Glenwood Ave., 27608		
Hoover, Dr. Dale M., (Jean), Head, Ec. & Bus.	3273	782-3135
201-B Patterson, Box 8109; 3419 Redbud Ln., 27607		
Hoover, Dr. Maurice W., (Rhea), Prof. Emer., Food Sci.		851-1977
Box 7624; 920 Merwin Rd., 27606		
Hoover, Dr. Michael T., (Diana), Asst. Prof., Soil Sci.	2190, 3285	469-0506
3403 Williams, Box 7619; 805 Palmetto Dr., Cary 27511		
Hopfenberg, Dr. Harold B., (Patsy), Prof. & Head, Chem. Engr.	2318	829-1973
113 Riddick, Box 7905; 207 W. Park Dr., 27605		
Hopfensperger, James A., Asst. Prof., Design	3260	833-1217
201-D Leazar, Box 7701; 1020 W. Peace St., #K5, 27605		

Name, Title, Department and Address	Office Phone	Resid. Phone
Hopke, Dr. William E., (Carvie E.), Prof. Emer., Counselor Educ.	2244	828-1488
520 Poe, Box 7801; 204 Myers Ave., Deland, FL 27604	904-736-3199	
Hoppe, Carol L., Lect., Engl.	3854	967-1719
G131 Tompkins, Box 8105; 1 Velma Rd., Chapel Hill 27541		
Hopper, Sallye F., (Bob), Prog. Off. Mgr., Univ. Stu. Ctr.	2451	878-0169
3114 Univ. Stu. Ctr., Box 7306; 925 Pebblebrook Dr., 27609		
Horan, Dr. Patricia F., (Garry Besigel), Asst. Prof., Psy.	2253	469-2665
625 Poe, Box 7801; 108 Dunhagan Pl., Cary 27511		
Horie, Dr. Yasuyuki, (Donna), Prof., Civil Engr.	2331	782-4757
316 Mann, Box 7908; 4417 Woodbury Dr., 27612		
Horn, Dr. John W., (Pat), Prof., Civil Engr.	2331	787-4539
422 Mann, Box 7908; 3612 Anclote Pl., 27607		
Horne, Grace S., (Phillip), Lect., Engl.	3854	489-8928
102 Tompkins, Box 8105; 5 Little Spring Lane, Durham, 27707		
Horne, Dr. Helen S., (Wess), Sec., Civil Engr.	2331	828-3387
201 Mann, Box 7908; 2700 Little John Rd., 27610		
Horning, David J., Strength Coach, Athl.	3957	832-1017
Weisiger-Brown Athl. Fac., Box 8502; 1605 Dare St., 27608		
Horton, Annis, Hskp. Asst., Phys. Plant	3323	828-9216
Park Shops, Box 7219; 1718 Fountain Dr., 27610		
Horton, Catherine H., (William), Hskp., Stu. Aff.	3340	362-4125
Univ. Stu. Ctr., Box 7306; Rt. 4, Box 269, Apex 27502		
Horton, Charlie H., Hskp. Asst., Phys. Plant	3323	779-6540
Park Shops, Box 7219; 306 Coachman Dr., Garner, 27529		
Horton, Dr. H. Robert (Robert), Prof., Biochem.	2581	851-0193
344 Polk, Box 7622; 3717 Eakley Ct., 27606		
Horton, Hazel W., Lab. Tech., Health Serv.	2564	556-3411
Clark Inf., Box 7304; 914 N. White St., Wake Forest 27587		
Horton, Robert, Maint. Mech., Phys. Plant	3080	833-2729
Armory Shop, Box 7219; 3102 Woodpecker Ct., 27610		
Horton, Rossie L., Hskp. Asst., Phys. Plant	3323	
Park Shops, Box 7219		
Horton, Rufus R., Jr., (Linda), Agri'l. Res. Tech., Hort. Sci.	3346	362-7411
70 Kilgore, Box 7609; Box 615, Apex 27502		
Horton, Sandra B., (Tony), Med. Tech., Micro., Path., & Parasit., SVM ...	829-4390	872-3379
4700 Hillsborough St., Box 8401; 3911 Memory Ln., 27604		
Horton, Walter C., Supv., Refuse Disp., Phys. Plant	3800	494-2917
Recla. Ctr., Box 7219		
Hosokawa, Amy M., Clk. Typ. Hist.	3383	755-1429
162 Harrelson, Box 8108; 3209-K Calumet Dr., 27610		
Hotter, Elaine, (Gerald), Sec., Ec. & Bus.	2256	469-4651
209 Patterson, Box 8109; 1048 Ivy Lane, 27511		
Houck, Byard, Jr., (Peggy), Dir., Engr. Spec. Prog.	2341	851-7605
115 Page, Box 7904; 800 Brent Rd., 27606		
Houck, Peggy H., (Byard), Sec., Univ. Acct., Fin. & Bus.	3824	851-7605
213 Admn. Serv. Ctr., Box 7205; 800 Brent Rd., 27606		
House, Andrew, (Elizabeth), Elec. Tech., Rad. Prot.	2894	467-8874
214 Clark, Box 7108; 1313 Hampton Valley Rd., Cary 27511		
House, Charles E., (Nancy), Res. Tech., Gen.	2285	266-9445
2634 Gardner, Box 7614; Rt. 1, Knightdale 27545		
House, Dava L., Typ., Math.	2382, 2383	897-5145
250 Harrelson, Box 8205; P.O. Box 262, Coats, 27521		
House, Dr. Garfield J., (Hope), Asst. Prof., Ent.	2638	469-2527
840 Method Rd., Unit I, Box 7628; 111 Black Bear Ct., Cary 27511		
House, Linnie T., (Leroy), Stock Clk. Supv., Univ. Dining	3963	365-5432
Dining Hall, Box 7307; 920 Popular Ct., Wendell 27591		
House, Nancy W., (Charles), Agri'l. Res. Tech., Plant Path.	2751	266-9445
3410 Gardner, Box 7616; Bethlehem Church Rd., Knightdale 27545		
House, Patricia A., Food Serv. Asst., Univ. Dining	3963	269-7004
Dining Hall, Box 7307; P.O. Box 10242, 27605		
House, Raymond E., (Crystal), Mail Clk., Phys. Plant	3974	831-9301
Leazar, Box 7219; 2520 Old Garner Rd., 27610		
Householder, Kathy, Sec., Hardware Shop, Phys. Plant	3323	266-5458
11 Park Shops, Box 7219; 7600 Poole Rd., 27610		

Name, Title, Department and Address	Office Phone	Resid. Phone
Houser, Gloria W., (John Anthony), Head, Serials G-116 Library, Box 7111; 2821 Fowler Ave., 27607	2842	834-6149
Howard, Barbara C., CPS, Admn. Sec., Bio. Sci. 2717 Bostian, Box 7611; 1408 Lorimer Rd., 27606	3341	851-4584
Howard, Blanche S., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 6 Hyde Terr., 27601	3323	832-7922
Howard, Dr. Donald R., (Mary Lynn), Assoc. Dean & Dir., Acad. Aff., SVM 4700 Hillsborough St., Box 8401; 1116 Plateau Ln., 27609	829-4212	847-7547
Howard, Janet M., (Owolabi Fawole), Minority Recruiter, Lifelong Educ. 210 McKimmon, Box 7401; 1606 Poole Rd., 27610	7007	828-0411
Howard, Jerome, Hskp. Asst., Phys. Plant Park Shops, Box 7219; P.O. Box 232, Spring Hope, 27882	3323	478-5180
Howard, Pamela C., Purchasing/Mat. Mgr., SVM 4700 Hillsborough St., Box 8401; 637 Buck Jones Rd., 27606	829-4209	
Howard, Paul K., Hskp. Supv., Phys. Plant Park Shops, Box 7219	3323	
Howard, Dr. Richard D., (Pat), Dir., Inst'l. Res. 202 Peele, Box 7002; 3708 Yates Pond Rd., 27606	2776	832-3425
Howard, Rose J., (Tim), Acct. Clk., Food Sci. 100 B Schaub, Box 7624; P.O. Box 656, Angier, 27501	2953	639-6843
Howard, Selvie, Mach. Oper., Phys. Plant Recla. Ctr., Box 7219; P.O. Box 322, Middlesex, 27557	3800	235-4450
Howe, Dr. Ann C., (Charles), Head, Math. & Sci. Educ. 326-S Poe, Box 7801; 1107 Harvey St., 27608	2238	821-4131
Howell, Ezra L., (Dot), Prof. Emer., Bio. & Agri'l. Engr. Box 7625; 1414 Trailwood Dr., 27606		851-6789
Howell, Wade, Jr., (Nadine H.), Tech., Ind. Engr. Park Shops, Box 7906; 7501 Post Oak Rd., 27609	3661	848-4575
Howells, David H., (Virginia), Prof. Emer., Water Resou. Res. Inst. 225 Page, Box 7912; 4913 Larchmont Dr., 27612	2815	787-6420
Hoy, Dr. Darrell E., (Debbie), Vis. Asst. Prof., Mech. & Aero. Engr. 2201 Broughton, Box 7910	2365	872-6394
Hoyle, Steve T., (Gale), Agri'l. Res. Tech., Crop Sci. Ext. 1215 Williams, Box 7620; Rt. 1, Box 116-B, Kittrell 27544	3633	492-9352
Hoyt, Dr. Greg D., (Gale), Asst. Prof., Soil Sci. 2016 Fanning Bridge Rd., Fletcher, 28732-9628;		704-684-3562
89 Clement Dr., Horse Shoe, 28742		704-891-8028
Hren, Dr. John J., (Joyce), Prof. & Head, Mat. Engr. 229 Riddick, Box 7907; 706 Queensferry Rd., Cary 27511	3568, 2377	467-7853
Hsich, Sue J., (Henry), Comp. Oper., Dairy Rec. Proc. Ctr. Leazar, Box 7623; 118 Loch Haven Ln., Cary 27511	2075	859-1910
Hu, Wilma W. L., Res. Asst., Crop Sci. 1203 Williams, Box 7620; 2404 Greenway Ave., 27608	2657	782-8544
Huang, Dr. Barney K., (Lindy), Prof., Bio. & Agri'l. Engr. 183 Weaver, Box 7625; 3332 Manor Ridge Dr., 27603	3121	772-8446
Huang, Dr. Jeng-Sheng, (Pi-yu), Assoc. Prof., Plant Path. 1530 Gardner, Box 7616; 3325 Boulder Ctr., 27607	2735	781-0671
Hubbard, Bessie R., Mech. Sys. Engr., Phys. Plant 14 Morris, Box 7219; 116 Ransom St., Fuquay-Varina 27526	2184	552-7809
Hubbard, Carol E., (Jack), Dept. Budg. Clk., Mar., Earth & Atmos. Sci. 214 Withers, Box 8208; 1519 Trailwood Dr., 27606	3711	851-2386
Hubbard, John G., (Carol), Supv., Capital Assets Acct. 202 Admn. Serv. Ctr., Box 7205; 1519 Trailwood Dr., 27606	2148	851-2386
Hubbard, Mark A., (Joanna), Agri'l Res. Tech., For. 1005 Biltmore, Box 8002; 801 W. Cabarrus St., 27603	3168	
Huber, Dr. Steven C., (Betty), Assoc. Prof., Crop Sci. & Bot. 3127 Ligon St., Box 7631; 504 Merwin Rd., 27606	3905	851-7946
Hubert, Viki M., Pers. Asst., Univ. Temp. Serv., Human Resou. Admn. Serv. Ctr., Box 7210	7060	
Hudnall, David R., Chemist, Crop Sci. 210 Polk, Box 7621; 1400 P Steinbeck Dr., 27609	2763	872-5697
Hudson, Dr. Lola C., Asst. Prof., Anat., Physiol. Sci. & Radiol., SVM 4700 Hillsborough St., Box 8401; 3112-G Aileen Dr., 27606	829-4200	851-5044

Name, Title, Department and Address	Office Phone	Resid. Phone
Hudson, Dr. Peyton B., Assoc. Prof., Text. Mgmt. & Tech. 205 Nelson, Box 8301; 2803 Everett Ave., 27607	3890	834-5211
Hudson, Ruby J., Clk.-Typ., Bio. & Agri'l. Engr. 107 Weaver, Box 7625; 2759 Layden St., 27603	2694	828-5524
Hudson, Teresa S., (Joseph), Sec., Univ. Stu. Ctr. 3111 Univ. Stu. Ctr., Box 7306; 5017 Swift Ridge Rd., 27606	2452	851-4101
Huffman, Rhonda W., Asst. Dir., Admis. 112 Peele, Box 7103; 208 Lincoln Ct., 27610	2437	833-0884
Huggard, Dr. John P., (Jennifer), Lect., Ec. & Bus. 318-A Hillsborough Bldg., Box 8110; 8921 Hunting Tr., 27612	3041	848-3414
Huggins, Janice B., (Hank), Res. Tech., Ani. Sci. 1150 Grinnells, Box 7626; 107 Wyatts Pond Lane, Cary, 27511	2019	467-8954
Hughes, George R., (Vivian), Prof. Emer., Hort. Sci. Ext. 160 Kilgore, Box 7609; 3509 Sloan Ct., 27606	3321	851-1475
Hughes, Joseph V., Sr., (Sandra), Food Serv. Supv., Univ. Dining Dining Hall, Box 7307; 1818 Gorman St., Apt. E., 27606	3963	833-6055
Hughes, Dr. Paul B. Vis. Scientist, Ent. Unit IV, Method Rd., Box 7633	2274, 2275	
Hughes, Robin W., Sec., Counselor Educ. 520 Poe, Box 7801; 3813 Lupton Cir., 27606	2244	828-0250
Hughes, Ronald M., (Fonda), Ext. Swine Testing Spec., Ani. Sci. Swine Eval. Sta., Clayton; Rt. 1, Box 313B, Wendell, 27591	553-7696	365-3736
Hugus, Dr. Z Z, Jr., (Nancy), Prof., Chem. 412 Dabney, Box 8204; 1201 Glen Eden Dr., 27612	2937	787-5079
Huie, Earl B., (Rachel), Res. Tech., Crop Sci., USDA 3127 Ligon St., Box 7631; 110 Village Ct., Garner, 27529	2734	779-3620
Huie, Rachel S., (Earl), Res. Tech., Bio. & Agri'l. Engr. 270 Weaver, Box 7625; 110 Village Court, Garner, 27529	3121	779-3620
Huish, Dr. Melvin T., (Laura), Prof., Zool. 4105 Gardner, Box 7617; 3415 Noel Ct., 27609	2631	782-7428
Huisingsh, Dr. Donald, (Jo), Prof., Univ. Stud. 140 Harrelson, Box 7107; 1213 Kingston Rd., Cary 27511	2479	467-0892
Humenik, Dr. Frank J., (Sue), Prof. & Assoc. Head In Charge, Bio. & Agri'l. Ext., Bio. & Agri'l. Engr. 200 Weaver, Box 7625; 4008 Pepperton Dr., 27606	2675	851-0557
Humphreys, Dr. Trevor P., Res. Assoc., Elec. & Comp. Engr. 434 Daniels, Box 7911; 910 Marilyn Dr., 27607	2336	833-3747
Humphries, Dr. Ervin G., (Geneva), Prof., Bio. & Agri'l. Engr. 121 Weaver, Box 7625; 913 Merwin Rd., 27606	3101	851-1249
Humphries, Geneva L., (Ervin), Accts. Payable Clk., SSS SSS, Box 7224; 913 Merwin Rd., 27606	2161	851-1249
Humphries, William S., Sr. News Ed. Emer., Agri'l. Comm. 2901 Oberlin Rd., 27608		781-2509
Hunt, Dorothy H., (E. Bryant), Libr. Asst., Design Libr. 209 Brooks, Box 7701; 3902 Wester Rd., 27604	2207	876-4253
Hunt, Dr. Elaine, (Steven Van Camp), Asst. Prof., Food Ani. & Equ. Med., SVM 4700 Hillsborough St., Box 8401; 1216 Kingston Ridge Rd., Cary 27511	829-4288	467-6080
Hunt, Iris R., Area Dir. Housing & Res. Life 208 Harris, Box 7315; South Hall	2406	737-5176
Hunt, John N., (Anne), Ext. Spec., Bio. & Agri'l. Engr. 109 Weaver, Box 7625; 4616 Spring Dr., 27606	2694	851-5901
Hunt, Karen D., Acct. Tech., Budg. Off. 206 Holladay, Box 7206; 1504-A Mary Francis Pl., 27606	2175	851-6483
Hunt, Karen O., Cash., Fin. & Bus. 2 Peele, Box 7213; 207 G-Long Dr., Garner, 27529	2988	
Hunt, Louis D., (Dawn), Vet. Tech., Food Ani. & Equ. Med., SVM 4700 Hillsborough St., Box 8401, 4940 B Pebble Beach Dr., 27604	829-4200	878-3841
Hunt, Margaret R., Head-Col. Dev. & Acq., Libr. 3128 Library, Box 7111	3187	
Hunt, R. Ivan, (Pattie), Agri'l. Res. Tech., Hort. Sci. 62 Kilgore, Box 7609; 6000 Buffaloe Rd., 27604	3346	876-7476
Hunter, Barbara A., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 800 Booker St., Apt. E-55, 27610	3323	828-3963

Name, Title, Department and Address	Office Phone	Resid. Phone
Hunter, Bernice E., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 1121 Walnut St., 27601	3323	828-6378
Hunter, Betsy M., (Wiley), Budg. Clk., Zool. 3213 Gardner, Box 7617; 4417 James Rd., 27604	3194, 2741	876-6749
Hunter, Jeff N., Mgr., Info. Ctr., Admn. Comp. Serv. 14 Peele, Box 7208; 1314 Lorimer Rd., 27606	3110	851-4601
Hunter, Karen, Libr. Asst., Acqs. Libr. Library, Box 7111	3187	
Hunter, Dr. Lee J., Resid. Int., Public Health, SVM 4700 Hillsborough St., Box 8401	829-4200	
Hunter, Leon R., (Jeanette), Electronic Tech., Phys. Plant Armory, Box 7219; 108 Glenn Bryan Court, Garner, 27529	3080	779-7175
Hunter, Leslie P., (Brenda), Res. Tech., For. 103 Enterprise St., Box 8006; 4110 Gregory Ln., 27610	3566	834-6604
Hunter, Lucie R., (Bill), Mgr., Reserva. & Catering, Univ. Stu. Ctr. 2102 Univ. Stu. Ctr., Box 7307; 3404 Coleridge Dr., 27609	2249	787-1750
Hunter, Lucille, Hskp. Asst., Phys. Plant Park Shops, Box 7219; 601 Parnell Dr., 27610	3323	
Hunter, Luther, Hskp. Asst., Phys. Plant Park Shops, Box 7219	3323	
Hunter, Marvin, Hskp. Asst., Univ. Dining Erdahl-Cloyd Annex, Box 7307	3270	
Hunter, Preston B., Hskp. Stu. Aff. Price Music Ctr., Box 7311; 1104 CasPan, 27610	2981	833-7201
Hunter, Rhonda N., (Jim), Libr. Asst., Ref. Library, Box 7111; 3916-C Marcom St., 27606	2935	829-0597
Hunter, Richard L., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 525 Lansing St., 27610	3323	834-8623
Hunter, Robert L., (Lucille), Res. Tech., Poul. Sci. 4 Scott, Box 7608; 1328 Beverly Dr., 27610	2628	828-4125
Hunter, Susie W., Admn. Sec., Psy. 640 Poe, Box 7801	2251	
Hunter, Thelma M. A., Prog. Asst., Con. Educ. & Professional Dev. 223 McKimmon, Box 7401; 130 Rainbow Ct., Cary 27511	2261	467-9534
Hunter, Willie, Laborer, Phys. Plant Sullivan Dr., Box 7219; 3401 Jack Rd., Clayton 27520	3408	553-5586
Huntley, Wilson C., (Tracy), Agri'l. Res. Engr., Bio. & Agri'l. Engr. 135 Weaver, Box 7625; 104 Creighton Ct., Cary 27511	3121	469-1770
Hurdle, Lynn, Resid. Life 208 Harris, Box 7315; 213-C Bragaw, 27695-7315	2406	737-6702
Hutchins, Charles W., Trades Helper, Phys. Plant Park Shops, Box 7219; 2300 Avent Ferry Rd., Apt. G-8, 27606	3323	829-9484
Hutchison, Elvan E., (Geneve), Assoc. Prof., Text. Mgmt. & Tech. 122 Nelson, Box 8301; 5100 Huntingdon Dr., 27606	3485	851-4997
Hutchison, Dr. Paul T., (Mildred), Lect., Elec. & Comp. Engr. 220 Daniels, Box 7911; 3316 Manor Ridge Dr., 27603	2336	779-6796
Huxster, William T., (Secunda), Prof. & Spec., Ext. For. Resou. 3028-F Biltmore, Box 8003; 509 Ortega Rd., 27609	3386	
Huyler, Arthur F., (Phyllis), Agri'l. Res. Tech., Hort. Sci. 68 Kilgore, Box 7609; 3400 Bell Dr., 27610	3346	834-2282
Hyatt, Dr. George, Jr., (Virginia), Agri'l. Ext. Serv. Dir. Emer., Prof. Emer., Adult & Comm. Coll. Educ. 310B Poe; 1419 Lutz Ave., 27607	3590	787-5271
Hyman, Betty E., (Ronnie), Supv., Circ. Proc., Circ. 1212 Library, Box 7111; 436 Lansing St., 27610	3364	832-8448
Hyman, Dr. David N., (Linda), Prof., Ec. & Bus. 306B Hillsborough Bldg., Box 8110; 306 Furches St., 27607	2472	834-3572
Hyman, Shirley J., Data Entry Oper., Univ. Dining Dining Hall, Box 7307; 1409 Gorman St., 27606	2857	834-1607
Hyman, Dr. Theodore M., Asst. Prof., Soc. & Anth. 231 1911 Bldg., Box 8107; 2800-201 Avent Ferry, 27606	2491	851-5511

Name, Title, Department and Address	Office Phone	Resid. Phone
I		
Iddings, Donald A., Arch., Supt. Design Serv., Phys. Plant .....2184	828-8567	
7-A Morris, Box 7219; 528 N. Person St., 27604		
Ihnen, Dr. Loren A., (Shirley), Prof., Ec. & Bus. ....3886	851-4477	
219F Hillsborough Bldg., Box 8110; 5021 Dunbar Rd., 27606		
Iijima, Dr. Toshiro, Adj. Prof., Text. Chem.		
Tokyo Inst. of Technology, Tokyo, 156 Japan		
Illingworth, Arthur W. F., Jr., (Susan), Supv., Engr. Res. Serv. Div. ....2834	492-9819	
1136 Burlington, Box 7903; 230 Turner Ave., Henderson 27536		
Imboden, Thomas E., Clk., Agri'l. Comm. ....2861	832-6601	
Ricks Annex, Box 7603; 1601 Hillsborough St., 27605		
Imbriani, Dr. Jack L., Adj. Asst. Prof., Plant Path. ....733-2655	779-5004	
NCDA Agronomic Div., Blue Ridge Rd. Ctr.;		
104 Falling Creek Ct., Garner 27529		
Ingle, Becky F., Sec., Prov. Off. ....2194	839-8414	
1 Holladay, Box 7101; 304 W. Aycock St., 27608		
Ingram, Barbara T., (Gilbert S.), Word Proc. Oper., SVM ....829-4200	851-0798	
4700 Hillsborough St., Box 8401; 3736 Eakley Ct., 27606		
Ingram, Carolyn R., (Donald), Sec., Prov. Off. ....3148		
201 Holladay, Box 7101; 905 Weston St., 27610		
Ingram, Soloanu B., Hskp., Stu. Aff. ....2981	833-3443	
Price Music Ctr., Box 7311		
Irlbeck, Barbara C., (Bill), Sec., Ani. Sci. ....2773	781-5399	
319 Polk, Box 7621; 5321 Inglewood Lane, 27609		
Irons, Nanda W., (Gene), Clk., Grad. Sch. ....2872	847-7195	
104 Peele, Box 7102; 715 Tanglebrook Way, 27609		
Irving, J. Deane, Oper., Comp. Ctr. ....2517	787-2254	
127 Hillsborough Bldg., Box 7109; 406 Yarmouth Rd., 27608		
Irving, Paul E., Res. Tech., Anat., Physiol. Sci. & Radiol., SVM ....829-4200	967-7627	
4700 Hillsborough St., Box 8401; S-7 TarHeel Manor Apts., Carrboro 27510		
Isely, Dr. J. Jeffery, Res. Assoc., Zool. ....2589	467-5813	
4106 Gardner, Box 7617; 706 N. Hampton Dr., Cary 27511		
Isenhour, Joseph W., Jr., (Joanne), Asst. Prof., Phys. Educ. ....2487	787-4171	
2047 Carmichael, Box 8111; 5404 Farley Dr., 27609		
Isley, S. Gerald, Lect., Ind. Engr. ....2362	848-6569	
323 Riddick, Box 7906; 5024 Springwood Dr., 27612		
Isphording, Helen (Jo) R., (Page), Ticket Mgr., Wolfpack Club ....2112	787-3040	
College Inn, Box 8602; 501 N. Glen Dr., 27609		
Israel, Dr. Daniel W., (Judy), Assoc. Prof., Soil Sci. ....2388	851-6121	
3203 Williams, Box 7619; 5100 Wickham Rd., 27606		

J

Jackson, Barbara M., (Reggie), Lab. Tech., Lab. Ani. Res., SVM829-4201	266-2902	
4700 Hillsborough St., Box 8401; Rt. 2, Box 134, 27610		
Jackson, Charles B. Stock Clk., SVM ....829-4200	831-9213	
4700 Hillsborough St., Box 8401; 721 Dorothea Dr., Apt. A, 27603		
Jackson, Dr. D. Michael, (Becky), USDA Assoc. Prof., Ent. ....693-5151	693-2053	
Tobacco Res. Lab., P.O. Box 1555, Oxford, 27565; 205 Grace St., Oxford 27565		
Jackson, Denis S., (Sylvia), Dir., McKimmon Ctr., Lifelong Educ. ....2277	552-6349	
225 McKimmon, Box 7401; 401 Meadow Dr., Fuquay-Varina 27526		
Jackson, Jan E., (Lawrence), Sec., Physics ....7877	779-2263	
111 Bureau of Mines, Box 8202; 4216 Mountainbrook Rd., Apex, 27502		
Jackson, Lawrence A., (Janice), Stock Supv., Agri'l. Comm. ....2791	779-2263	
2 Ricks, Box 7603; 4216 Mountainbrook Dr., Apex, 27502		
Jackson, Linda F., Admn. Off., Res. Admin. ....2444		
Lower Level, Leazar, Box 7003		
Jackson, Lisa C., (Mark), Vet. Tech., Food Ani. & Equ. Med., SVM ....829-4396	362-4955	
4700 Hillsborough St., Box 8401; Rt. 1, Box 11A, New Hill 27562		
Jackson, Louis D., (Shirley), Agri'l. Res. Tech., Hort. Sci. ....3346		
70 Kilgore, Box 7609; Rt. 3, Box 199-D, Wake Forest 27587		

Name, Title, Department and Address	Office Phone	Resid. Phone
Jackson, Peggy H., Sec., Phys. Plant 103 Morris, Box 7219	2181	
Jackson, Phyllis H., (Ted), Workshop Supv., Ind. Ext. Serv. 215-P Page, Box 7902; 3713 Yates Pond Rd., 27606	2358	828-6853
Jackson, Timothy L., Elec. Apprentice, Phys. Plant Armory Shop, Box 7219; P.O. Box 990, Angier, 27501	3080	639-6716
Jackson, Vicki, Teller, Credit Union 2802 Hillsborough St., Box 8609	2686	
Jackson, Dr. Walter A., Asst. Prof., Hist. 104 Harrelson, Box 8108; 1220 A Clarendon St., Durham 27705	2483	286-7378
Jackson, Dr. William A., (Jacqueline), WNR Prof., Soil Sci. 3214 Williams, Box 7619; 3611 Swann Dr., 27612	2388	782-6323
Jackson, William D., (Elizabeth), Photo. Set., Univ. Graphics Sullivan Dr., Box 7226; Box 141, Rt. 7, 27614	2131	847-0813
Jacobs, Lorraine T., Libr. Asst., Vet. Med. Libr. 4700 Hillsborough St., Box 8401; E-36 Washington Terr., 27610	829-4218	832-2569
Jahn, Larry G., (Ellen), Asst. Prof. & Spec., Ext. For. Resou. 3033-B Biltmore, Box 8003; 420 Warren Ave., Cary 27511	3386	467-0263
James, Brenda C., Sec., Soc. & Anth. 339 1911 Bldg., Box 8107; 2929 Gladstone Dr., 27610	2702	832-5793
Jamieson, Catherine A., Ext. Spec., Bio. & Agri'l. Engr. 622 Downtown Blvd., Box 7625; 2408 H Landmark Dr., 27607	3723	781-8512
Janney, Terri L., Asst. Dir., Thompson Thea. Thompson Thea., Box 7305; 876 Green Pine Dr., 27603	2405	828-3812
Janolino, Dr. Violeta G., (Larry), Researcher, Food Sci. 224 Schaub, Box 7624; 2617 Catalina Dr., 27607	2968	781-9589
Janowitz, Dr. Gerald S., (Barbara), Prof., Mar., Earth & Atmos. Sci. 228F Withers, Box 8208; 1305 Huntwood Ln., Cary 27511	7837	467-6993
Jans, Dr. Heather, Intern. Sm. Ani., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401	829-4200	
Jarrett, Dr. Ronald E., (Lois), Assoc. Prof., Crop Sci. Ext. 2407 Williams, Box 7620; 2817 Neward Dr., 27610	2246	821-5745
Jay Paula C., (John), Med. Lab. Tech., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 2621 Layden St., 27603	829-4200	829-9298
Jayes, Kevin D., Libr. Clk., Periodicals G-114 Library, Box 7111; 705-108 Cardinal Gibbons Dr., 27606	3136	829-9414
Jeffreys, Joyce T., Sec., Trade Serv., Phys. Plant 5 Park Shops, Box 7219; 3604 Sue Ellen Dr., 27604	3323	
Jeffreys, Phyllis R., Clk.-Typ., Fin. & Bus. 2 Peele, Box 7213	2985	
Jeffries, Jackie L., (Janet), Labor Crew Ldr., Phys Plant 4700 Hillsborough St., Box 8401; 1300 N. King Charles Rd., 27610	829-4217	833-0233
Jeffries, Larry W., Laborer, Phys. Plant Sullivan Dr., Box 7219; 1505 Apt. B, Burgundy Dr., 27610	3408	833-1241
Jenkins, Alice B., Libr. Clk., Docu., Libr. 2110 Library, Box 7111; 4414 James Rd., 27604	3280	876-6578
Jenkins, Dr. Alvin W., (Margaret), Prof., Physics 420 Cox, Box 8202; 1912 Myron Dr., 27607	2515	781-6187
Jenkins, Dr. David M., (Jackie), Head, Agri'l. Comm. 118 Ricks, Box 7603; 12117 Strickland Rd., 27612	2800	847-5641
Jenkins, Donald, (Anna Marie), Laborer, Phys Plant Sullivan Dr., Box 7219; 824 S. Pettigrew St., 27610	3408	
Jenkins, Dr. Evelyn E., (Walt), Supv., Sm. Ani. Clinic, Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 1220 Gifford Ct., Cary, 27511-5113	829-4200	469-3553
Jenkins, LeVon L., Purch. & Storeroom Mgr., Univ. Dining 3805 Beryl Rd., Box 7307; 1012 Belfast Dr., 27610	7012	832-1215
Jenkins, Dr. Mitchell J., (Carol), Prof. Emer., Hort. Sci. Rt. 3, Box 100-D, Hampstead 28443		270-2684
Jenkins, Pamela K., (Dave), Stat. Res. Asst., Poul. Sci. 111 Scott, Box 7608; 3136 Taylor's Ridge Rd., Wake Forest 27587	2628	266-5249
Jenns, Dr. Anne E., (Marshall Hardy), Res. Assoc., Plant Path. 3418 Gardner, Box 7616; 3505 Horton St., Apt. 103, 27607	2751	782-7191

Name, Title, Department and Address	Office Phone	Resid. Phone
Jernigan, Catherine L., Comp. Prog., Dairy Rec. Proc. Ctr.	7828	
Leazar, Box 7623		
Jernigan, Maverine A., (P. B.), Admn. Sec., Acad. Skills Prog.	3037	772-2846
300-D Poe, Box 7105; Rt. 3, 27603		
Jervay, Paulette E., (Paul), Dir., Found. Acct. & Invest.	2110, 3565	851-1432
B Holladay, Box 7207; 1341 Swallow Dr., 27606		
Jervis, Larry G., (Elsie), Assoc. Prof., For.	2891	467-6733
2018D Biltmore, Box 8002; 1105 W. Durham Rd., Cary 27511		
Jett, Dr. Jackson B., Jr., (Delorah), Assoc. Dir.,		
Tree Impr. Prog., Assoc. Prof., For.	3168	851-4167
1019 Biltmore, Box 8002; 1404 Lorimer Rd., 27606		
Jewell, Dr. Larry R., (Donna), Assoc. Prof. & Coord.,		
Agri'l. Educ./Occup. Educ.	2234	781-4542
602-M Poe, Box 7801; 5005 Stoneridge Dr., 27612		
Jeziarski, Dr. Elisabeth M., Lect., For. Lang.	2475	489-4205
123 1911 Bldg., Box 8106; 1101 Norwood Ave., Durham 27707		
Jindra, Janet L., Sec., Crop Sci.	3267	
4124 Williams, Box 7620		
Johns, Harriet B., (William), Baker, Univ. Dining	2021	833-7483
B-113 Univ. Stu. Ctr., Box 7307; 1205 Sherwood Ave., 27610		
Johns, William D., (Roberta), Mech., Phys. Plant	3749	832-8257
Riddick Stad., Box 7219; 900 Hadley Rd., 27610		
Johnsen, Linda, Vis. Lect., For. Lang.	2475	834-4730
135-A 1911 Bldg., Box 8106; 2206 Fairview Rd. 1, 27608		
Johnson, Betty Sue, Dupl. Equip. Oper., Univ. Stu. Ctr.	2451	821-2370
Univ. Stu. Ctr., Box 7306; Rt. 9, Box 115, 27606		
Johnson, Beverly M., Lab. Res. Spec., Soil Sci.	2636	876-6763
3319 Williams, Box 7619; 3617 Arrowwood Dr., 27604		
Johnson, Blanche M., (Edward L.), Typ., Ec. & Bus.	2607	782-6219
216 Patterson, Box 8109; 3108 Cartwright Dr., 27612		
Johnson, Brenda W., (Ronald), Sec., Physics	7893	
400 Cox, Box 8202; Rt. 3, Box 341 T. Fuquay-Varina 27526		
Johnson, Dr. Bryan H., (Annette), Prof., Ani. Sci.	2768	362-7206
231 Polk, Box 7621; 5413 Dutchman Dr., 27606		
Johnson, Dr. Charles E., (Luise), Prof., Physics	2512	
418 Cox, Box 8202		
Johnson, Dr. Cynthia E., Human Dev. Spec. & Asst. Prof.,		
Agri'l Ext. Serv.	2770	783-7962
F2 Ricks, Box 7605; 5532 Hamstead Crossing, 27612		
Johnson, Darnell, Clk.-Typ., Psy.	2253	552-9324
640 Poe, Box 7801; Rt. 2, Box 278, Fuquay-Varina 27526		
Johnson, Deborah K., Res. Tech., Anat., Physiol. Sci. & Radiol., SVM	829-4399	
4700 Hillsborough St., Box 8401; 4357-4 Avent Ferry Rd., 27606		
Johnson, Donna Y., (Paul), Admn. Sec., SVM	829-4214	772-6165
4700 Hillsborough St., Box 8401; 403 Enid Pl., Garner 27529		
Johnson, Glenda W., (Kelvin), Sec., Stu. Aff., Upward Bound	3632	839-8180
205 Peele, Box 7317; 721-B S. Bloodworth St., 27601		
Johnson, Glenwood, Hskp. Supv., Phys. Plant	3323	851-4329
Park Shops, Box 7219; 1137 Crab Orchard Dr., 27606		
Johnson, Gloria P., (Wayne), Admn. Asst., Prov. & Vice Chan. Off.	2195	828-2396
109 Holladay, Box 7101; 714 Atwater St., 27607		
Johnson, Greg L., (Elizabeth), Ext. Spec., Agri'l. Meteorology, Hort Sci.	3537	266-6334
123 Kilgore, Box 7609; 3104 Billiard Ct., Wake Forest 27587		
Johnson, Gwendolyn L., Sec., Ani. Sci.	2761	829-1359
117 Polk, Box 7621; 1512 Carnegie Dr., Apt., BT, 27610		
Johnson, Dr. J. Clyde, (Agnes), Prof. Emer., Psy.	2252	787-6833
640-B Poe, Box 7801; 3318 Hampton Rd., 27607		
Johnson, Jannie M., Hskp. Ast., Phys. Plant	3323	834-7917
Park Shops, Box 7219; 1216 Armstrong Cir., 27610		
Johnson, Jerry G., (Betty), Grounds Supv., Phys. Plant	3408	897-7642
Sullivan Dr., Box 7219; Rt. 1, Coats 27521		
Johnson, Jimmie D., (Sophia), Instru. Mkr., Physics	2508	787-6542
7 Cox, Box 8202; 4205 Yadkin Dr., 27609		

Name, Title, Department and Address	Office Phone	Resid. Phone
Johnson, Joan O., (Curtis), Admn. Sec., Biochem. 126 Polk, Box 7622; 1209 Heritage Dr., Wendell 27591	2581	365-6989
Johnson, Joann P., Acct. Tech., Agri'l. Res. Admin. 120 Patterson, Box 7601; 106 Madrid Crt., Garner, 27529	2715	772-8270
Johnson, Johnny A., Agri'l. Res. Asst. Univ. Res. Unit 2, 3720 Lake Wheeler Rd., Box 7601; 5520 Old South Rd.	2759	821-3545
Johnson, Joseph A., Litho., Univ. Graphics Sullivan Dr., Box 7226; P. O. Box 531, Benson 27504	2131	894-2375
Johnson, Joyce B., (Ben), Sec., Plant Path. 2518 Gardner, Box 7616; Rt. 3, Box 404, Knightdale 27545	2735	266-2144
Johnson, Judy M., Sec., Hort. Sci. 132 Kilgore, Box 7609; Rt. 1, Box 143B, Coats 27521	3132	894-8381
Johnson, Dr. Martha R., Prof. & Asst. Dir., In Charge Home Ec., Agri'l. Ext. Serv. 107 Ricks, Box 7605; 118 Heidinger, Cary 27511	2781	469-3877
Johnson, Matthew, (Cindy), Plumber, Phys. Plant Armory Shops, Box 7219; Rt. 1, Box 384B, Zebulon, 27597	3080	365-7240
Johnson, Michael C., Floor Maint. Asst., Phys. Plant Park Shops, Box 7219; 1816 Eastern Blvd., 27610	3323	
Johnson, Ola M., Hskp. Asst., Phys. Plant Park Shops, Box 7219	3323	
Johnson, Patsy J., Rec. Clk., Payr. & Ben. Admn. Serv. Ctr., Box 7215; Rt. 1, Box 483, Lillington, 27546	2151	639-2435
Johnson, Dr. Paul R., (Eloise), Prof., Ec. & Bus. 220-F Patterson, Box 8109; 1520 Delmont Dr., 27606	2608	851-4982
Johnson, Priscilla D., Food Serv. Asst., Univ. Dining Dining Hall, Box 7307; 1512 Carnage Dr., Apt. A-8, 27610	3963	
Johnson, Dr. Richard R., Assoc. Prof., Mech. & Aero. Engr. 4151 Broughton, Box 7910; 103 Hunters Ridge Rd., Chapel Hill, 27514	3241	967-1607
Johnson, Ronald B., (Brenda), Agri'l. Res. Tech., Plant Path. 2604 Gardner, Box 7616; Rt. 3, Box 341-T, Fuquay-Varina 27526	2735	552-6442
Johnson, Dr. Roy H., Jr., (Donna), Asst. Prof., Text. Engr. & Sci. B-1 Nelson, Box 8301; 509 Annandale Dr., Cary 27511	3481	467-1910
Johnson, Sherry M., (Carl), Asst., Inter. Libr. Loans 1133 Library, Box 7111; 1210 Highland Rd., Garner 27529	2116	772-5142
Johnson, Susan A., (Daniel), Area Dir., Resid. Life 208 Harris; Box 7315, 27695-7315	2900, 2406	6780
Johnson, Theresa L., Data Entry Oper., Ec. & Bus. 317 Hillsborough Bldg., Box 8110; 405 Todd Hill Dr., Wendell 27591	3041	365-6935
Johnson, Dr. Thomas, (Cleta), Prof., Ec. & Bus. 219-C Hillsborough Bldg., Box 8110; 1217 Wellington Ln., Cary 27511	3886	467-4982
Johnson, Van, (Michael Goins), 4710 Edwards Mill Rd., 27612	829-4320	782-5764
Johnson, Vernon W., (Betty), Res. Tech., For. 1005 Biltmore, Box 8002; 307 Lombard St., Clayton 27520	3168	553-5213
Johnson, Vicki S., Clk.-Typ., Phys. Educ. 2012 Carmichael, Box 8111; P. O. Box 633, Coats 27521	3161, 3162	897-5800
Johnson, W. James, Res. Unit Mgr., Ani. Sci. 3720 Lake Wheeler Rd., Unit 2, Box 7621; 3919 Inwood Rd., 27603	2637	832-0038
Johnson, Wayne B., (Gloria P.), Comp. Oper., Comp. Ctr. 127 Hillsborough Bldg., Box 7109; 714 Atwater St., 27607	2523	828-2396
Johnson, Dr. William H., (Glenda), Asst. Dir., Agri'l. Res. Serv., 100 Patterson, Box 7601; 4000 Brothwell Ct., 27606	2717	851-1869
Johnson, Dr. William L., (Thais), Prof., Ani. Sci. 242-C Polk, Box 7621; 2717 Loop Rd., Clayton, 27520	2766	553-5009
Johnston, Dr. David W., (Brenda), Prof., Civil Engr. 212 Mann, Box 7908; 6904 Woodmere Dr., 27612	2331	848-1863
Johnston, Dr. Karen L., Assoc. Prof., Physics 405A Cox, Box 8202; 3108 Merriane Dr., 27607	2515	782-6904
Johnston, Dr. Robert E., (Jane), Assoc. Prof., Microb. 4602B Gardner, Box 7615; 518 Dixie Trail, 27607	2393	833-2487
Johnston, Tracy L., (Ted), Clk., Career Plan. & Place. 28 Dabney, Box 7303; 512 Applecross Dr., Cary 27511	2396	467-8201

Name, Title, Department and Address	Office Phone	Resid. Phone
Johnston, Dr. William R., (Louise L.), Asst. Prof. Emer., Chem. 127 W. Park Dr., 27605		833-0697
Jolley, Amie L., Asst. Dir., Stu. Serv., Text. 120 Nelson, Box 8301; 1065 Nichols Dr., 27605	3780	834-3473
Jones, Audrey L., Asst. Prog. Dir., Housing & Resid. Life 208 Harris, Box 7315; 6048 Iona Place, 27606	2406	851-8442
Jones, Barbara B., (Ed), Acct. Clk., Admin. Serv., Engr. 101 Page, Box 7901; 612 Mial St., 27608	3329	834-5288
Jones, Betty J., Med. Rec. Asst., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 2114 Mayview Rd., 27607	829-4200	833-8085
Jones, Billy D., (Sue), Acct., Budg. Off. 206 Holladay, Box 7206; 2608 Catalina Dr., 27607	2175	781-0905
Jones, Bruce A., (Wilma), Hskp. Asst., Phys. Plant Park Shops, Box 7219; Rt. 1, Box 279, Apex, 27502	3323	772-8124
Jones, Dr. Charla L., (Dr. Howard E. Blatt), Asst. Prof., Comp. Ani. & Sp. Species Med., SVM 4700 Hillsborough St., Box 8401, RD 2, Box 122, Apex 27502	829-4369	362-4198
Jones, Dr. Charles P., (Kay), Edwin Gill Prof., Ec. & Bus. 220C Patterson, Box 8109; 1025 Cedarhurst Dr., 27609	2608	872-6702
Jones, Diane M., (Steve), Clk.-Steno., Ent. 2301 Gardner, Box 7613; 7409 Penny Rd., 27606	2620	
Jones, Donald W., Food Serv. Asst., Univ. Dining Dining Hall, Box 7307	3963	
Jones, Donnell, Hskp. Asst., Phys. Plant Park Shops, Box 7219; 314 New Rand Rd., Garner, 27529	3323	772-1682
Jones, Dorothea L., Data Entry Oper., Dairy Rec. Proc. Ctr. Leazar, Box 7623; 1920-104 Eyrie Ct., 27606	2075	851-7251
Jones, Dr. E. Walton, (DeAnn), Prof. Emer., Ec. & Bus. 5 W. Hargett St, Suite 410, 27101; 6412 Arnold Rd., 27607		851-1525
Jones, Dr. Evan E., (Verleen), Prof., Ani. Sci. & Biochem. 325 Polk, Box 7621; 3407 Arrowwood Dr., 27604	2773	876-3443
Jones, Dr. Frank T., (Aileen), Assoc. Prof., Poul. Sci. Ext. 204 Scott, Box 7608; 6801 Erin Ct., 27609	2621	847-1051
Jones, George D., (Marjorie), Prof. Emer., Ext. Ent. 2437 Springmoor Cir., 27609		848-7437
Jones, Gertie B., (Ben), Acct. Clk., Crop. Sci. 2125B Williams, Box 7620; 5728 N. Sharon Dr., 27603	2647	
Jones, Gloria H., (Frankie), Clk.-Typ., Acad. Skills Prog. 528 Poe, Box 7105; 1510 Creech Rd., Garner, 27529	3592	839-5805
Jones, Greg, Orderly, Health Ser. Clark Inf., Box 7304; 402-B N. George St., Goldsboro 27530	2562	
Jones, Dr. Guy L., Prof. Emer., Crop Sci. Ext. 3435 Blue Ridge Rd., 27612		787-4564
Jones, Herbert, Laborer, Phys. Plant Sullivan Dr., Box 7219; 218 Heck St., 27610	3408	833-9794
Jones, Dr. Ivan D., (Lillian), Prof. Emer., Food Sci. Box 7624; 2710 Rosedale Ave., 27607		832-3091
Jones, J. C., (Jean), Marine Adv. Serv. Dir. Emer., UNC Sea Grant, Agri'l. Ext. Serv. 2904 Chipmunk Ln., 27607		782-4653
Jones, Dr. James R., (Betty), Prof., Ani. Sci., Spec. in Charge Swine Ext., Ani. Sci. 201 Polk, Box 7621; 3304 Caldwell Dr., 27607	2566	787-5174
Jones, James W., (Pauline), Gen. Utility Wkr., Phys. Plant Sullivan Dr., Box 7219; 2509 Remington Rd., 27610	3408	829-1338
Jones, Janice F., Cash., Univ. Dining Erdahl-Cloyd Annex, Box 7307; 801 Elkhart Dr., Apt. F, 27610	3270	828-0322
Jones, Jeanne H., Clk., Agri'l. Comm. Ricks, Box 7603; 2407 Stafford Ave., 27607	2791	828-7380
Jones, Jeffrey A., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 219-C Park Ave., 27615	3323	833-7211
Jones, Josephine, Hskp. Asst., Phys. Plant Park Shops, Box 7219; 404 Loop Rd., Garner, 27529	3323	772-2442

Name, Title, Department and Address	Office Phone	Resid. Phone
Jones, Juanita L., DCP, Laun. Laundry, Box 7218; 829 Brigham Dr.	2122	832-1728
Jones, Julie B., (Dan), Acct. Tech., Budg. Off. 206 Holladay, Box 7206; 127 Kennel Lane, Clayton 27520	2175	553-3251
Jones, Kaye H., (Donald), Typ., Mat. Engr. 229 Riddick, Box 7907; 6112 Countryview Ln. 27606	2377	832-5355
Jones, Dr. L. Meyer, Adj. Prof., Anat., Physiol. Sci. & Radiol., SVM Box 8401		
Jones, Larry K., (Delissia), Mail Clk., Phys. Plant Leazar, Box 7219; 1432 Wabash St., 27701	3974	596-5540
Jones, Dr. Lawrence K., (Jeanine), Prof., Couns. Educ. 520C Poe; 317 Meredith St., 27606	2244	851-4586
Jones, Dr. Louis A., (Alice), Prof., Chem. 525A Dabney, Box 8204; 5108 Huntingwood Dr., 27606	2940	851-2299
Jones, Marilyn, Hskp. Asst., Phys. Plant Park Shops, Box 7219; 303 Gatewood Dr., Garner, 27529	3323	
Jones, Mary S., (Michael E.), Res. Tech., Gen. 2633 Gardner, Box 7614; 6127-B Shanda Dr., 27609	2285	847-1617
Jones, Maude C., (James E.), Libr. Asst., Acqs., Libr. 3125 Library, Box 7111; 2613 Ramsey Rd., 27604	3187	872-7474
Jones, Melvin, (Ann), Painter, Phys. Plant Park Shops, Box 7219; 2803 Williams Rd., 27610	3323	821-2439
Jones, Otis J., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 1108 E. Martin St., 27610	3323	755-1141
Jones, Pearlina D., Food Serv. Asst., Univ. Dining Dining Hall, Box 7307; P. O. Box 704, Apex 27502	3963	362-7053
Jones, Dr. Ronald K., (Bonnie), Prof., Plant Path. 1405 Gardner, Box 7616; Rt. 1, Box 403, Apex 27502	2711	779-2593
Jones, Rosemary M., Asst. Dir., Con. Educ. & Professional Dev. 147-C McKimmon, Box 7401; 1215 Sturdivant Dr., Cary 27511	2261	467-6923
Jones, Shannon C., (Jerry), Agri'l. Res. Tech., Ent. Ext. Varsity Dr., Box 7613; 2695 Medlin Rd., Clayton, 27520	2003	553-7602
Jones, Sharon A., Clk.-Typ., Acct. Pay. 213 Admn. Serv. Ctr., Box 7204; 605 E. South St., 27601	2139	828-9276
Jones, Sharon M., Clk.-Typ., Crop Sci. 2409 Williams, 5405 Portree Pl., 27606	2246	859-0759
Jones, Dr. Victor A., (Maryetta), Prof. & Teach. Coord., Food Sci. 100-D Schaub, Box 7624; 618 Richard Dr., Cary 27511	2952	467-6568
Jones, Viva D., (Ed), Clk., Admis. 107 Peele, Box 7103; 6332 Deerview Dr., 27606	2433	851-3076
Jones, Walter E., Dir., Career Plan. & Place. 28 Dabney, Box 7303; 301 Danforth Ct., 27609	2396	848-1478
Jones, Willie E., (Lucy), Main. Mech., Bio. & Agri'l. Engr. 130 Weaver, Box 7625; 508 Austin St., 27601	3101	828-1743
Jones, Willie L., (Barbara), Res. Tech., Ent. 3709 Hillsborough St., Box 8604; 1209 Blarney Ct., 27610	3391	832-5457
Joost, Dr. Michael G., (Reda), Assoc. Prof., Ind. Engr. 211 Park Shops, Box 7906; 8841 Woodyhill Rd., 27612	7816	848-6896
Jordan, Brenda B., (John), Acct. Clk., Accts. Pay. 213 Admn. Serv. Ctr., Box 7204; Rt. 3, Box 289-B, 27603	2158	779-3379
Jordan, Nancy B., (Tim), Clk.-Typ., Soil Sci. 3412 Williams, Box 7619; 4105 Woodlake Pl., 27607	2600	781-7072
Jordan, Dr. William J., (Margaret), Prof. & Head, Speech-Comm. 206 Winston, Box 8104; 1332 Trailwood Dr., 27606	3204	
Joyce, Dr. Thomas W., Prof., Wood & Paper Sci. 3104 Biltmore, Box 8005; 1105 Troon Ct., Cary 27511	2888	469-2144
Joyner, Charles E., (Lorenzo), Asst. Dean, Design 200B Brooks, Box 7701; 1304 Stony Point Ln., Cary 27511	2201, 2202, 2208	467-5053
Joyner, Donald R., Lab. Ani. Tech., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 2948 Ligon St. #4, 27607	829-4200	
Joyner, Gwen R., (Wayne), Sec., Ec. & Bus. 201 Patterson, Box 8109; 7100 Pilgrim Rd., 27604	3273	876-4343
Joyner, Kimberly C., Prog. Asst., For., Acid Depos. Prog. 1509 Varsity Dr., Box 7632; 5712 Dumfries Dr., 27609	3520	876-4242

Name, Title, Department and Address	Office Phone	Resid. Phone
Joyner, Ron L., (Suzanne), Res. Tech., Bot. 7826, 2778	365-5375	
3908 Inwood Rd., Box 7632; Rt. 2, Box 74-A, Apex 27502		
Judd, Amelia A., Hskp. Asst., Phys. Plant 3323	834-1185	
Park Shops, Box 7219; 3118 Woodpecker Ct., 27610		
Judd, James C., Plumber, Phys. Plant 3080	828-1208	
Armory Shops, Box 7219; 1209 N. King Charles Rd., 27610		
Judd, Lillie V., Hskp. Asst., Stu. Aff. 3340	833-0457	
Univ. Stu. Ctr., Box 7306; 912 Greenwich, 27610		
Judd, Sarah E., Hskp. Asst., Phys. Plant 3323		
Park Shops, Box 7219		
Jurdjevic, Dr. Deborah S., Lect., Engl. 3863		
208 Tompkins, Box 8105		
Justice, Mary Ann, Sec., Ec. & Bus. 3951	847-5254	
203 Patterson, Box 8109; 800-102 Navaho Dr., 27609		

K

Kahn, Dr. Joseph S., (Carol Jean), Prof., Biochem. 2581	832-6284	
130-C Polk, Box 7622; 2822 Mayview Rd., 27607		
Kalat, Dr. James W., (Ann), Assoc. Prof., Psy. 2252	872-1702	
704 Poe, Box 7801; 3401 Brentwood Rd., 27604		
Kamphoefner, Dr. Henry L., (Mabel), Prof. & Dean Emer., Design 2203, 2206	787-2698	
212C Brooks; 3060 Granville Dr., 27609		
Kamprath, Dr. Eugene J., (Katharine), Prof., Soil Sci. 2388	851-4253	
3208 Williams, Box 7619; 101 Merwin Rd., 27606		
Kamykowski, Dr. Daniel, (Sara-Joan Zentara), Prof., Mar., Earth & Atmos. Sci. 7894	467-7582	
128 Withers, Box 8208; 1110 Brookgreen Dr., Cary 27511		
Kane, Michael B., Field Coord., Genetic Tests, CAMCORE Coop., For. 2738	469-3731	
Res. Annex West, Box 8007; 212 Bay Dr., Cary 27511		
Kaneko, Dr. Ken-Ichi, Vis. Schol., Micro., Path. & Parasit., SVM 829-4200	828-0478	
4700 Hillsborough St., Box 8401; 2300 Avent Ferry Rd. #N7, 27606		
Kanipe, John T., Jr., (Jane), Vice Chan., Development 2846	781-9098	
12 Holladay, Box 7501; 3500 Lubbock Dr., 27612		
Karam, Dr. Nasser H., Res. Assoc., Elec. & Comp. Engr. 2336	851-9021	
437 Daniels, Box 7911; 2104 Gorman St., 27606		
Karp, Debra A., Asst. Dir., Stewart Thea. 3927	828-1044	
1202E Univ. Stu. Ctr., Box 7306; 104½ Montgomery St., 27607		
Karvazy, Dr. Eszter S., (John R. Brown), Phys., Health Serv. 2562	968-1430	
Clark Inf., Box 7304; 1525 Crestwood Ln., 27514		
Kashef, Dr. Abdel-Aziz I., (Mahassen), Prof. Emer., Civil Engr. 787-3997		
5504 North Hills Dr., 27612		
Kataoka, Dr. Hiroko C., (Samuel K. Coleman), Assoc. Prof., For. Lang. & Lit. 2475	847-1805	
124 1911 Bldg., Box 8106; 3900 Maplefield Dr., 27612		
Katz, Dr. Steven B., (Alison), Asst. Prof., Engl. 3870		
249 Tompkins, Box 8105		
Katzin, Dr. Gerald H., (Judith), Prof., Physics 2512	787-3480	
410-F Cox, Box 8202; 5338 Thayer Dr., 27612		
Kauffman, Carol A., (William), Sec., Mech. & Aero. Engr. 3024	755-1158	
4216 Broughton, Box 7910; 2737 Rosedale Ave., 27607		
Kauffman, Dr. James F., (Karen), Assoc. Prof. & Grad. Administrator, Elec. & Comp. Engr. 2336	848-0299	
238 Daniels, Box 7911; 7006 Valley Lake Dr., 27612		
Kauffman, Terry J., (David Burton), Lect., Speech-Comm. 3204	481-0098	
206 Winston, Box 8104; 199 Black Bear Ct., Cary, 27511		
Kawanishi, Dr. Clinton Y., (June), Adj. Assoc. Prof., EPA HERL MD67 541-7965	847-3029	
Res. Tri. Park, 27711; 5205 Sedgefield Dr., 27609		
Kearney, Howard L., (Brenda), Food Serv. Asst., Univ. Dining 3963	782-7415	
Dining Hall, Box 7307; 6225 Creedmore Rd., 27612		

Name, Title, Department and Address	Office Phone	Resid. Phone
Kearney, Paulette, Cash. Supv., Fin. & Bus.	2988	
2 Peele, Box 7213; G-5, Washington Terr. Apts., 27610		
Kearney, Vivian J., Plumber, Phys. Plant	3080	553-3815
Armory Shop, Box 7219; Paradise Vil. Lot 73, Clayton, 27520		
Keating, Harold, (Mary Lee), Assoc. Prof. Emer., Phys. Educ.		787-9397
2709 Royster Rd., 27608		
Kebschull, Dr. Harvey G., (Georgia), Assoc. Prof., Pol. Sci. & Pub. Admin.	2481	787-7923
218 Link Bldg., Box 8102; 1108 Bancroft Dr., 27612		
Keck, Lillie B., Libr. Asst., Govt. Docu.	3280	834-9768
2110 Library, Box 7111; 207 Bart St., 27610		
Keech, Lewis C., HVAC Tech. Phys. Plant	3080	839-0419
Armory Shop, Box 7219		
Keel, Olivia B., (Willie), Sec., Pol. Sci. & Pub. Admin.	2481	779-2552
214 Link Bldg., Box 8102; 2832 Oak Ridge Ct., 27603		
Keen, Ray, (Bonnie), Staff Supv., Vet. Teach. Hosp., SVM	829-4200	
4700 Hillsborough St., Box 8401; 905 7th Ave., Apt. 46B, 27529		
Keene, Brenda D., Asst. Equip. Mgr. Athl., Athl.	2807	851-3880
Reynolds Coliseum, Box 8501; 2812 Apt. 202, Avent Ferry Rd., 27606		
Keener, Donald S., Asst. Dir., Gen. Serv.	2843	787-6706
1318 Library, Box 7111; 3411 Leonard St., 27607		
Kesler, George A., Lab Res. Spec., Microb.	7850	878-5945
4626 Gardner, Box 7615; 2400 Spring Forest Rd., 27609		
Keever, Dr. Dennis W., (Trudy), USDA Asst. Prof., Ent.	693-5151	383-4150
Box 1555; Tobacco Res. Lab., Oxford, 27565; 4404 Talcott Dr., Durham, 27705		
Keith, Ernestine M., (Larry), RN, Fam. Nurse Pract.		876-1739
Clark Inf., Box 7304; 3117 Barnsley Ln., 27604		
Keith, Marie S., Grad. Sec., Mech. & Aero. Engr.	2365	
3221 Broughton, Box 7910; 205 Breckenridge Dr.		
Kelbaugh, Sherwood C., (Barbara), Asst. Dir., Conc. & Vend., Univ. Dining	2021	782-3737
119 Reynolds Coliseum, Box 7307; 3805 Beryl Rd.		
Keller, Anna P., (Walter M.), Dean. Admis.	2437	851-5164
112 Peele, Box 7103; 1021 Deboy St., 27606		
Kelley, Dr. Carl T., (Chung-Wei), Assoc. Prof., Math.	7895	
337 Harrelson, Box 8205; 108 Prestwick Place, Cary, 27511		
Kelley, Marjorie J., (Glenn), Bus. Mgr., Wolfpack Club	2112	851-3283
College Inn, Box 8602; 6612 Electra Dr., 27607		
Kellison, Jim, Art.-Illus., Graphics, UNC Ctr. for Pub. TV	2853	834-0815
TV Ctr., Box 8601; 722 E. Whitaker Mill Rd., 27608		
Kellison, Dr. Robert C., (Larita), Prof., For.	3674	787-3409
2023 Biltmore, Box 8002; 1316 Dixie Tr., 27607		
Kelly, Billy R., Elec., Phys. Plant	3080	772-4924
Armory Shop, Box 7219; 1405 Valley Dr., 27603		
Kelly, Dr. John R., (Helene), Prof., For. Lang.	2476	781-1791
136 1911 Bldg., Box 8106; 3313 Felton Pl., 27612		
Kelly, Mary E., (Jerry), Res. Analyst, Biochem.	2581	832-7304
345 Polk, Box 7622; 5521 Swiftbrook Cir., 27606		
Kelly, Mary L., Laundry Wkr., Laun.	2122	839-8149
Laundry, Box 7218; 1212 Savannah Dr. 27609		
Kelly, Dr. Myron W., (Sandra), Prof., Wood & Paper Sci.	3181	266-3096
1022D Biltmore, Box 8005; P. O. Box 112, Knightdale 27545		
Kelly, Dr. Patrick J., Resid., Sm. Ani. Int. Med., SVM	829-4200	
4700 Hillsborough St., Box 8401		
Kelsay, Paula C., Clk.-Recept., Univ. Graphics	2131	469-1927
Sullivan Dr., Box 7226; 423 Dorothy Dr., Cary, 27511		
Keltie, Dr. Richard F., (Laura), Assoc. Prof., Mech. & Aero. Engr.	3024	872-9258
2221 Broughton, Box 7910; 6336 Bayswater Trail, 27612		
Kemp, Ronald E., Dir., Media Serv., Hum. & Soc. Sci.	3334	832-7388
G116 Tompkins, Box 8101; 408-A Clover Ln., 27604		
Kenion, Sandra M., Acct. Tech., Payr. & Ben.	2151	851-6045
Admn. Serv. Ctr., Box 7215; 712-D Powell Dr., 27606		
Kennedy, Dr. George G., (Leslie), Prof., Ent.	3579	362-4011
Res. Annex, Ligon Ext., Box 7630; Rt. 2, Box 120, Apex 27502		

Name, Title, Department and Address	Office Phone	Resid. Phone
Kenneson, John G., Asst. Track Coach., Athl.	3455	
115 Reynolds Coliseum, Box 8501		
Kennihan, Dorothy L., (Tom), Admn. Asst., Agri'l. Ext. Serv.	2811	847-4560
104 Ricks, Box 7602; 11516 Strickland Rd., 27612		
Kenny, Nancy B., (Tom), Clk.-Recept., Vet. Teach. Hosp., SVM	829-4200	469-0948
4700 Hillsborough St., Box 8401; Rt. 4, Box 825H, Apex, 27502		
Kent, Deena M., (Mike), Vet. Tech., Vet. Teach. Hosp., SVM	829-4200	829-4022
4700 Hillsborough St., Box 8401; 3937-D Marcom St., 27606		
Kerby, Dr. J. Howard, Assoc. Prof., Zool. & Asst. Ldr., Fishery Res., Coop. Unit, Zool.	2631	781-5587
4107 Gardner, Box 7617; 4025 Balsam Dr., 27612		
Kerley, Claude L., (Barbara), Renov. Design Tech., Phys. Plant	2184	492-1989
10-E Riddick Stad., Box 7219; Rt. 1, Box 355C, Kittrell 27544		
Kerr, Rebecca B., (Felix), Acct. Clk., Admn. Serv., Engr.	3329	266-6972
101 Page, Box 7901; 3304 Greenville Loop Rd., Wake Forest, 27587		
Kershaw, Kitty M., (John D.), Clk.-Typ., Admn. Off.	2843	878-8763
1204 Library, Box 7111; 6500 Johnsdale Rd., 27609		
Kessel, Dr. John J., (Sue Hall), Asst. Prof., Engl.	3863	781-7083
274 Tompkins, Box 8105; 5430 Sharpe Dr., 27612		
Kessler, Dr. Sanford H., (Sheva Zucker), Assoc. Prof. & Dir., Law & Pol. Phil. Concen., Pol. Sci. & Pub. Admin.	2481	781-1207
208 Link Bldg., Box 8102; 3018 Farrior Rd., 27607		
Keys, Lynda S., (Robert), Acct. Clk., Admn. Serv., Engr.	3329	847-0069
101 Page, Box 7901; 7604 Mine Shaft Rd., 27609		
Keys, Dr. Robert D., (Lynda), Assoc. Prof., Seed Res., Crop Sci.	3267	847-0069
4411 Williams, Box 7620; 7604 Mine Shaft Rd., 27609		
Khalil, Ashraf G., (Rhonda), Gen. Utility Wkr., Phys. Plant	3408	872-5792
Sullivan Dr., Box 7219; 2731 Patrick Rd., 27607		
Khorram, Dr. Siamak, (Raquel), Dir., Comp. Graphics Ctr., Prof., Elec. & Comp. Engr. & For.	3430, 2336, 2892	
338 Daniels, 3024 Biltmore, Box 7106, 7911, 8002; 6320 Ansley Ln., 27612		
Khosla, Dr. N. Paul, (Jody), Assoc. Prof., Civil Engr.	2331	847-0025
409 Mann, Box 7908; 10705 Dunhill Terr., 27609		
Khosla, Jody, (Dr. N.P.), Med. Lab. Tech., Physiol., SVM	829-4371	847-0025
4700 Hillsborough St., Box 8401; 10705 Dunhill Terr., 27609		
Kidd, Judy R., Lect., Engl.	3863	846-8995
202 Tompkins, 100 Ridgewood Dr., 1612, 27609		
Kidd, Kathleen A., Agri'l. Res. Tech., Ent. Ext.	3140	755-0385
1103 Grinnells, Box 7626; 1020 W. Peace St., Apt. R-4, 27605		
Kidd, Richard Henry., Lect., Phys. Educ.	2487, 2488	872-0045
2024 Carmichael, Box 8111; 5205 Fieldstone Dr., 27609		
Kilgroe, Gayla H., (Chris), Libr. Clk., Circ.	3364	467-8036
1214 Library, Box 7111; 118 Shirley Dr., Cary 27511		
Killam, Maria Patroni, Res. Tech., Food Sci.	2959	
229 Schaub, Box 7624		
Killough, Donalyn S., Phar. Tech., Vet. Teach. Hosp., SVM	829-4200	469-8030
4700 Hillsborough St., Box 8401; 104 Jamie Ct. #42, Cary 27511		
Kilpatrick, Dr. Peter K., (Nancy), Asst. Prof., Chem. Engr.	2327	851-6541
221A Riddick, Box 7905; 5101 Huntingdon Dr., 27606		
Kimberley, Dr. Michael M., (Susan), Assoc. Prof., Mar., Earth & Atmos. Sci.	7831	469-2692
102 Withers, Box 8208; 1105 Manchester Dr., Cary 27511		
Kimbrell, Jack E., (Katherine), Sr. Engr. Ext. Spec., IES	2358	467-6216
215-M Page, Box 7902; 702 W. Maynard Rd., Cary 27511		
Kimbrough, Linda E., Off. Mgr., Agri'l. Comm.	2861	782-4854
G-1 Ricks Annex, Box 7603; 4108 Deep Hollow Dr. 177, 27612		
Kimler, Dr. William, Asst. Prof., Hist.	2483	
Box 8108		
Kimsey, H. Ray, (Nancy), Prog. Analyst, Ext. Comp. Serv.	3727, 3741	772-7866
1110 Grinnells, Box 7626; Box 91, Monitor Ct., Apex 27502		
Kincheloe, Dr. Henderson G., (Chloris), Prof. Emer., Engl.		833-8459
210 Furches St., 27607		
King, Anne M., Res. Tech., SVM	829-4200	
4700 Hillsborough St., Box 8401; P.O. Box 46, Morrisville 27560		

Name, Title, Department and Address	Office Phone	Resid. Phone
King, Cyrus B., (Carolyn), Librn. Emer. 409 Yarmouth Rd., 27608		787-5461
King, Dr. Doris E., Prof., Hist. 116 Harrelson, Box 8108; 3402 Leonard St., 27607	2484	787-4917
King, Ebba K., (Larry), Ref. Librn., Libr. 1140 Library, Box 7111; 1713 Glen Eden, 27612	2935	787-6100
King, J. Barry, Res. Asst., Chem. Engr. 203 Riddick, Box 7905; 2617 Van Dyke Ave., 27607	2317	834-6047
King, Dr. Larry D., Assoc. Prof., Soil Sci. 4230 Williams, Box 7619; 1112 Lorimer Rd., 27606	2645	851-0376
King, Dr. Margaret F., (Bruce), Assoc. Prof., Engl. 278 Tompkins, Box 8105; 815 Marlowe Rd., 27609	3863	782-7860
King, Dr. Margaret W., Researcher, Biochem. 342 Polk, Box 7622; 4100 Mountainbrook Rd., Apex 27502	2581	772-6920
King, Mary, (Andrew), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 7 Brunswick Terr., 27601	3323	834-2340
King, Dr. Richard A., (Alfreda), M. G. Mann Prof., Ec. & Bus. 203-C Patterson, Box 8109; 2108 Buckingham Rd., 27607	3951	787-5803
King, Rosemary M., (Don), Asst. Supv., Fund Acct. 213 Admn. Serv. Ctr., Box 7203; 323 Bainbridge Cir., Garner 27529	2149	772-4675
King, Dr. Russell E., (Christina), Asst. Prof., Ind. Engr. 346 Riddick, Box 7906; 101 W. Gerrell Ct., Cary, 27511	2362	467-5039
King, Thelma E., Dupl. Oper., For. Resou. 3001 Biltmore, Box 8001; 2301 Derby St., 27610	2883	834-2078
Kinlaw, Rachel K., (Carl), Spec., Foods & Nutr., Agri'l. Ext. F-5 Ricks Annex, Box 7605; 4712 Quail Hollow Dr., 27609	2770	876-0192
Kirby, Bridget B., (Keith), Sec., Grad. Sch. 104 Peele, Box 7102; 3924-A Tara Dr. 27609	2872	787-0858
Kirby, Rosa D., (Charles), Res. Asst., Text. Chem. 4 Clark, Box 8302; 2816 Everett Ave., 27607	2551	834-2500
Kirkland, Dr. James B., Dean Emer., School of Educ. 730 Poe; 2621 Grant Ave., 27608		787-5475
Kirkman, Adrianna G., (Benson), Instr., Wood & Paper Sci. 3122 Biltmore, Box 8005; 708 Brent Rd., 27606	2888	859-1187
Kirkpatrick, Gary J., (Barbara), Res. Asst., Mar., Earth & Atmos. Sci. 128 Withers, Box 8208; 7112 Mill Ridge Rd., 27612	7894	848-1577
Kirsch, Sondra L., (John), Assoc. Prof., Rec. Resou. Admin. 4008H Biltmore, Box 8004; 7020 Farmdale Rd., 27610	3276	772-8797
Kiser, James N., (LeAnn), Asst. Football Coach, Ath. Weisiger-Brown Athl. Fac., Box 8502 1020 A-2 Avent Hill, 29606	2634	851-6568
Kittrell, Dan, Hskp. Asst., Phys. Plant Park Shops, Box 7219	3323	
Klaenhammer, Dr. Todd R., (Amy), Assoc. Prof., Food Sci. 339B Schaub, Box 7624; 6509 Bakersfield Dr., 27606	2971	851-6135
Klang, Dr. Eric C., Asst. Prof., Mech. & Aero. Engr. Box 7910	2365	
Klarman, Virginia R., (Bill), Empl. Spec., Human Resou. Admn. Serv. Ctr., Box 7210; 4707 Oak Park Rd., 27612	2135	787-2034
Klarman, Dr. William L., (Ginny), Prof. & Head, Plant Path. 2518 Gardner, Box 7616; 4707 Oak Park Rd., 27612	2730	787-2034
Kleeman, Edwina G., (Karl T.), Res. Asst., Food Sci. 341A Schaub, Box 7624; 619 Yarmouth Rd., 27607	2974	782-1533
Klein, Dr. Katherine W., Assoc. Prof., Psy. 708 Poe, Box 7801; 300 Lake Boone Tr.	2252	787-5419
Kleinstreuer, Dr. Clement, Assoc. Prof., Mech. & Aero. Engr. 4152 Broughton, Box 7910; 2723 Van Dyke Ave., 27607	3241	829-1146
Kleiss, Dr. H. Joseph, (Jacki), Assoc. Prof. Teach. Coord., Ext. Soils Spec. 2224 Williams, Box 7619; 601 Blackshoals Dr., Cary 27511	2643	467-8489
Klenin, Dr. Marjorie A., Assoc. Prof., Physics 210 Bureau of Mines, Box 8202	7457	
Klibbe, James W., (Edna Earle), Assoc. Prof. Emer., Text. 3113 Merianne Dr., 27607		787-5280

Name, Title, Department and Address	Office Phone	Resid. Phone
Klimstra, Ann W. (D. E.), Sec., Ext. Plant Path. Mt. Hort. Crops Res. Sta., 2016 Fanning Bridge Rd., Fletcher 28732-9628		704-684-3562
Rt. 3, Box 367, Hendersonville, 28739		704-693-6764
Klisiewicz, GERALYN, Rec.-Clk., Reg. & Rec.	2572	894-2337
100 Harris, Box 7313; Rt. 1, Box 182, Benson, 27504		
Klisiewicz, Mary J., (Roland), Sec., Foods & Nutrition, Agri'l. Ext.	2770	894-2337
F-5 Ricks Annex, Box 7605; Rt. 1, Box 182, Benson 27504		
Kloos, Dr. Wesley E., (Lyla), Prof., Gen.	2294	872-7330
3606 Gardner, Box 7614; 4001 Quail Hollow Dr., 27609		
Knapp, Dr. William A., Jr., (Mary), Vis. Prof., Anat., Physiol. Sci. & Radiol., SVM	829-4340	782-3178
4700 Hillsborough St., Box 8401; 3212 Queens Rd., 27612		
Knecht, Thomas W., (Andra), Sect. Head., Pub., Agri'l. Comm.	3173	787-0931
318 Ricks, Box 7603		
Knight, Dolores E., (George F.), Res. & Teach. Tech., Chem.	2948	851-4140
745 Dabney, Box 8204; 5009 Kaplan Dr., 27606		
Knight, Kam D., (Debbie), Boiler Oper., Phys. Plant	2184	829-9319
Heating Plant, Box 7219; 2510-A Clark Ave., 27607		
Knight, Dr. Kenneth L., (Ruth), Prof. Emer., Ent.	3836	787-8709
3311 Gardner, Box 7613; 2761 Rue Sans Famille, 27607		
Knoeber, Dr. Charles R. (Linda), Prof., Ec. & Bus.	2885	782-4623
310D Hillsborough Bldg., Box 8110; 824 Davidson St., 27609		
Knoll, Robert (Bob) W., Purch. Off., Purch. & Stores	2171	553-6095
201 Alumni, Box 7212; 2733 Guy Rd., Clayton 27520		
Knopp, Dr. James A., (Emily), Assoc. Prof., Biochem.	2581	782-4521
26A Polk, Box 7622; 424 Crescent Ct., 27609		
Knott, Betty F., (Sidney), Sec., Music	2981	467-8061
203 Price, Box 7311; 1102 Plantation Dr., Cary 27511		
Knott, Dr. Fred N., (Janet), Prof., Ani. Sci., Spec. in Charge, Dairy Ext.	2771	851-4184
102 Polk, Box 7621; 821 Ravenwood Dr., 27606		
Knott, Sherrie D., Prog. Asst., Con. Educ.	2261	469-0650
147 McKimmon, Box 7401; 110 Pat St., Cary 27511		
Knowles, A. Sidney, (Alice), Prof., Engl.	3863	839-1266
217 Tompkins, Box 8105; 2504 Winterbury Ct., 27607		
Knowles, Dr. Charles E., (Patricia), Assoc. Prof., Mar., Earth & Atmos. Sci.	7943	782-6658
228H Withers, Box 8208; 1222 Currituck Dr., 27609		
Knowles, Dr. Malcolm S., (Hulda), Prof. Emer., Educ.		851-0243
1506 Delmont Dr., 27606		
Knowles, Patricia C., (Ernest), Sec., Psycheducational Clinic & Psy.	2253	782-6658
628 Poe, Box 7801; 1222 Currituck Dr., 27609		
Koch, Annalise K., Libr. Tech. Asst., Ref.	2935	782-9774
1140 Library, Box 7111; 3313 Horton St., 27607		
Koch, Dr. Carl C., (Evelyn), Prof., Mat. Engr.	7340	847-9691
233 Riddick, Box 7907; 1713 Lookout Point Ct., 27612		
Kochersberger, Dr. Robert C., (Janet C. Watrous), Lect., Engl.	3854	833-2597
107 Tompkins, Box 8105; 900 Hillsborough St., 27603		
Kocurek, Alesia S., Sec., Credit Union	2686	
2802 Hillsborough St., Box 8609		
Koenigs, Dr. Jerome W., Adj. Prof., Plant Path.	541-6000	782-3960
Res. Tri. Inst., Ctr. for Environ. Quality Assurance; P.O. Box 12194, Res. Tri. Pk., 27709; 1714 Banbury Rd., 27609		
Koger, Jeanne B., (Bob), Res. Analyst, Ani. Sci.	2773	787-3153
326 Polk, Box 7621; 1420 Kershaw Dr., 27609		
Koh, Dr. Kwangil, (Toni), Prof., Math	3310	787-3362
336 Harrelson, Box 8205; 4812 Metcalf Dr., 27612		
Kohl, Jerome, (Freeke), Sr. Engr. Ext. Spec. & Lect., Nuc. Engr.	2303	833-2345
2105 Burlington, Box 7909; 807 Gardner St., 27607		
Kolb, Charles F., (Leah), Dir. Sum. Sess., Assoc. Dir. Cont. Educ., Asst. Prof. Hist. Emer.		772-0675
313 Loop Rd., Garner 27529		

Name, Title, Department and Address	Office Phone	Resid. Phone
Kolb, Dr. John R., (Barbara), Prof., Math & Sci. Educ. 326-K Poe, Box 7801; 6520 W. Lake Anne Dr.	2239	787-8116
Kolbe, Melvin H., (Doris), Prof. Emer., Hort. Sci. 3026 Devonshire Dr., 27607		787-6087
Koleno, Jeane C., (Steve), Clk.-Typ., Crop Sci. 2207 Williams, Box 7620; 1206 South Spring Garden Cir., 27603	2647	772-9491
Koleno, Steve M., (Jeane), Cabinet Maker, Phys. Plant Park Shops, Box 7219; 1206 S. Spring Garden Cir., 27603	3323	772-9491
Kolmstetter, Christine M., Res. Tech., Micro., Path. & Parasit., SVM 4700 Hillsborough St., Box 8401; 200-51D Woodcroff Pkwy., Durham, 27713	829-4362	493-2833
Konno, Dr. Takamichi, Vis. Scientist, Ent. Unit IV, Method Rd., Box 7633	2274, 2275	
Konsler, Dr. Thomas R., (Loretta), Prof., Hort. Sci. 2016 Fanning Bridge Rd., Fletcher 28732-9628		704-684-3562
805 Oakland St., Hendersonville, 28739		704-692-4784
Konya, Kenneth D., (Elaine), Res. Asst., Bio. & Agri'l. Engr. 152 Weaver, Box 7625; 609 Atchison, Garner, 27529	3121	779-5817
Koon, James F., (Faye), Teach. Tech., Civil Engr. 26 Riddick, Box 7908; 207 S. Mason St., Apex 27502	3423	362-7320
Koonce, Dr. Benjamin G., Prof. Emer., Engl. 2633 Dover Rd., 27608		
Koonce, Faye B., (Gale), Sec., Acad. Aff., Agri'l. & Life Sci. 115 Patterson, Box 7601; 135 Gail Ridge Ln., Wendell 27591	2614	266-9791
Korhonen, Reino W., Res. Asst., Food Sci. Seafood Lab., P.O. Drawer 1137, Morehead City 28557	726-7341	726-6876
Kornegay, Dr. Joe N., (Jan), Assoc. Prof., Comp. Ani. & Sp. Species Med., SVM 4700 Hillsborough St., Box 8401; 6001 Tarnhour Ct., 27612	829-4204	847-3937
Korte, Dr. Charles D., Prof., Univ. Stud./Assoc. Psy. 149 Harrleson, Box 7107; 1810 Park Dr., 27605	2479	829-1510
Krakowski, Alan J., Food Serv. Asst., Univ. Dining Dining Hall, Box 7307; 913 Popular Ct., Wendell 27591	3963	365-5640
Kramer, Dr. Paul J., (Edith), Vis. Scientist, Bot. Phyt. 2006 Gardner, Box 7618; 501 E. Whitaker Mill Rd., Apt. 401-A, 27608	2778	839-1796
Kreiter, Linda S., (William), Sec., Chem. 109 Dabney, Box 8204; 215 Whitehall Way, Cary 27511	2548	469-8914
Kremer, Ingrid G., Wordprocessor, Elec. & Comp. Engr./CCSP 312 Daniels, Box 7914; 204 Hillsbore, Cary 27511	2336	467-4843
Kriz, Dr. George J., (Pat), Assoc. Dir., Agri. Res. Serv., SALS 100-C Patterson, Box 7601; 302 Oak Ridge Rd., Cary 27511	2719	467-1056
Kronrad, Dr. Gary D., Asst. Prof., For. 103 Enterprise St., Box 8006; Rt. 1, Box 23, James Mill Ct., Apex 27502	3566	362-9500
Kruse-Elliott, Dr. Kris T., Resid., Anesthesiology, SVM 4700 Hillsborough St., Box 8401	829-4200	
Kuder, Dr. Pamela S., (Donald J. Meuten, D.V.M.), Vet. Dentist, Adj. Asst. Prof., Comp. Ani. & Sp. Species Med., SVM 4700 Hillsborough St., Box 8401; Rt. 5, Box 347, Pittsboro 27312	829-4224	542-3766
Kuehn, Dr. Richard T., (Nancy), Lab. Mgr., NCSU/MCNC Fab. Facility Elec. & Comp. Engr. 112 Daniels, Box 7911; 1312 Yubinaranda Cir., Cary 27511	2878	469-0682
Kuhr, Dr. Ronald J., (Mary), Prof. & Head, Ent. 2301 Gardner, Box 7613; 3505 Fernwood Dr., 27612	2746, 2620	781-5562
Kupiec, Dr. Paul H., 308-E Hillsborough Bldg., Box 8110; 8312 Old Deer Trail, 27609	2472	847-6192
Kwanyuen, Dr. Prachuab, (Puntipa), Res. Chem., Asst. Prof., Crop Sci. 3127 Ligon St., Box 7631; 920 Vickie Dr., Cary 27511	3905	469-2743
Kwong, Juliana M., (Luke), Res. Tech., Crop Sci. 4320 Williams, Box 7620; 6212 LakeRun Ct. 27612	3216	848-1945
Kyle, Betty, Med. Lab. Tech., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 511 Ridgecrest Rd.	829-4200	

L

Laarman, Dr. Jan G., (Olanda), Assoc. Prof., For.	2891	851-5079
3020 Biltmore, Box 8002; 5140 Norman Pl., 27606		
Lackey, Dr. Carolyn J., Spec., Foods & Nutr., Agri'l. Ext. Serv.	2770	847-1383
F-5 Ricks, Box 7605; 1608 Wedgeland Dr., 27609		
Lackey, Leigh T., Res. Asst., Urban Aff.	3211	851-2629
286 McKimmon, Box 7401; 5015-C Ft. Sumter Rd., 27606		
Lada, Dr. Thomas J., (Kathleen), Assoc. Prof., Math.	3200	851-1804
223 Harrelson, Box 8205; 5009 Newcastle Rd., 27606		
Lado, Dr. Fred, (Maria Dolores), Prof., Physics	7050	782-3267
214 Bureau of Mines, Box 8202; 3349 Hampton Rd. 27607		
LaGarde, Jerry M., (Stanley), Head Cash., Fin. & Bus.	2988	847-5168
2 Peele, Box 7213; 5508 Burnlee Pl., 27609		
Lait, Randy M., (Patricia), Food Serv. Supv., Univ. Dining	3270	779-7681
Erdahl-Cloyd Annex, Box 7307; 100-A Stowe Pl., 27529		
Lamb, Dr. H. Henry, (Linda), Asst. Prof., Chem. Engr.	2324	
113 Riddick, Box 7905		
Lamb, Dr. Vivian R., (Robert), Vis. Asst. Prof., Mar., Earth & Atmos. Sci.	3711	362-7341
219 Withers, Box 8208; Rt. 2, Box 111, Apex 27502		
Lambe, Dr. Philip C., (Catherine), Asst. Prof., Civil Engr.	2331	847-0509
319-B Mann, Box 7908; 6421 Battleford Dr., 27612		
Lambert, Dr. John R., Jr., (Dorothy W.), Prof. Emer., Univ. Stud.	2479	779-0832
148 Harrelson; Hermitage, Rt. 2, Box 284, 27610		
Lambert, Kathy A., Clk.-Typ. Acad. Skills Prog.	3163	467-2987
528-A Poe, Box 7105; 104 Manhattan Ct., Cary, 27511		
Lambert, Linda B., (John), Admn. Off., Water Resou. Res. Inst.	2815	832-7198
225 Page, Box 7912; 1929 Craig St., 27608		
Lambert, Robert B., Loan Officer, Credit Union	2686	
2802 Hillsborough St., Box 8609		
Lambeth, Lauris, (John), Sales Mgr., SSS	2161	833-4689
SSS, Box 7224; 308 Furches St., 27607		
Lammi, Dr. Joe O., (Eleanor H.), Prof. Emer., For.	206-423-7321	
121 Carlon Loop Rd., Lonview, WA., 98632-9601		
Lamont, Phyllis S., (William), Agri'l. Res. Tech., Ent. Ext.	2003	467-5021
1403 Varsity Dr., Box 7613; 147 Lake Pine Dr., Cary 27511		
Lamp, Dr. C. David, Res. Assoc., Elec. & Comp. Engr.	2336	782-6823
437 Daniels, Box 7911; 3501 Horton St. 201, 27607		
Lampe, Dr. John Harold, (Rose), Dean & Prof. Emer., Engr.		934-8644
306 Maplewood Dr., Smithfield 27577		
Lampert, Debra, Bakery Mgr., Univ. Dining	2021	851-1797
Univ. Stu. Ctr., Box 7307, 240 Singleton St., 27606		
Lampert, Dr. Emmett P., (Debra), Asst. Prof., Ent.	2765	851-1797
840 Method Rd.-Unit II, Box 7628; 240 Singleton St., 27606		
Lampley, Jean B., (Glenn), Sec., Ec. & Bus.	3881	848-1338
207 Hillsborough Bldg., Box 8110; 8617 Abbotsbury Ct., 27609		
Lamy, Richard J., (Rebecca), Instru. Mkr., Engr. Res. Serv. Div.	2834	829-1808
1136 Burlington, Box 7903; 3717 Melrose Dr., 27604		
Lancaster, Deborah C., Clk.-Typ., Vet. Teach. Hosp. SVM	829-4310	556-2132
4700 Hillsborough St., Box 8401; Rt. 7, Box 276, Louisburg, 27549		
Lancaster, Ibby J., Lab. Tech., Design	2204	
117 Brooks, Box 7701; 10608 Chelsea Dr., 27603		
Lancaster, Mary T., Res. Tech., Anat., Physiol. Sci. & Radiol., SVM	829-4200	
Box 8401		
Lancaster, Melody C., Sec., Stu. Dev.	2441	782-6251
214 Harris, Box 7314; 3504 Horton St., Apt. 101, 27607		
Lancia, Dr. Richard A., (Dorien), Assoc. Prof., For.	2891	851-9176
3019 Biltmore, Box 8002; 6324 Deerview Dr., 27606		
Landes, Chester G., (Dorothy), Assoc. Prof. Emer., Wood & Paper Sci.	704-274-0367	
Givens Estates, 215 Aldersgate Cir., Asheville 28803		
Lane, Bryce H., (Susanna), Lect., Hort. Sci.	3189	876-9274
112 Kilgore, Box 7609; 2365 Ravenhill Dr., 27609		

Name, Title, Department and Address	Office Phone	Resid. Phone
Lane, David J., (Sallie S.), Painter, Phys. Plant Park Shops, Box 7219; 1110 W. Garner Rd., Garner 27529	3323	772-1824
Lane, Deborah P., Supv., Accts. Pay. Mgr. 206 Admn. Serv. Ctr., Box 7204	2158	821-0382
Lane, Placid, Hskp. Asst., Phys. Plant Park Shops, Box 7219	3323	
Lane, Michael, Food Serv. Asst., Univ. Dining Dining Hall, Box 7307	3963	
Lane, Ramona L., Typ., Acid Depos. Prog., For. 1509 Varsity Dr., Box 7632; 900 Springview Tr., Garner 27529	3520	772-4042
Lane, Ruth R., Asst., Libr. 1124 Library, Box 7111; 544 Ellynn Dr., Cary 27511	2680	467-7905
Lane, Sallie S., (David), Supv., Univ. Food Serv. Syme Snack Bar, Box 7307; 1110 W. Garner Rd., Garner 27529	2127	772-1824
Lane, Dr. Stephen B., Resid., Neurology SVM 4700 Hillsborough St., Box 8401	829-4200	
Langdon, Andrew C., (Gwen F.), HVAC Mech., Phys. Plant Armory, Box 7219; Willow Spring, 27592	3080	552-5991
Langdon, Louis H., (Anna), Mech., Phys. Plant Armory Shop, Box 7219; RFD 3, Box 169 Fuquay-Varina, 27526	3080	552-4130
Langdon, Phillip O., (Carolyn), Syst. Analyst, Dairy Rec. Proc. Ctr. Leazar, Box 7623; Rt. 3, Box 329-A, 27603	2632	772-5784
Langdon, Virginia N., (Thomas H.), Sec., Agri'l. Ext. 110 Brooks Ave., Box 7602; 1517 Hall Blvd., Garner 27529	2983	772-1628
Lange, Marta A., Head, Reference Library, Box 7111	2935	
Lange, Martha S., (Peter), Asst. Prof., Design 215-C Brooks, Box 7701; 215 Monmouth Ave., Durham 27701	3785	688-3976
Langeland, Dr. Kenneth A., (Mary), Asst. Prof., Ext. Spec. Crop Sci. 4401B Williams, 3123 Ligon St., Box 7620; 410 Olive St., Apex 27502	2594	362-4203
Langfahl, James C., (Irma), Asst. Dir., Gen. Acct. 205 Admn. Serv. Ctr., Box 7205; 213 Longview Dr., Smithfield 27577	3823	934-3643
Langfelder, Dr. Jay, (Pat), Prof. Emer., Mar., Earth & Atmos. Sci. Harbor Branch Found. Inc., Ft. Pierce, Fl.		
Langley, Lorna W., State Agt., Ext. Agt. Emer. 312 W. Drewry Ln., 27609		782-2966
Langley, Teresa M., (Van), Sec., Phys. Plant 10 Riddick, Box 7219; Rt. 4, Box 248-E, Zebulon 27597	2181	
Langston, Jennifer L., Clk.-Typ. Ent. 2301 Gardner, Box 7613; 2511 Allen Rd., Clayton 27520	2620	934-7974
Langston, Pat. (Odell), Clk.-Steno., Urban Aff. 285 McKimmon, Box 7401; 302 Two Creeks Rd., Cary 27511	2578	469-4569
Lanier, Dr. Albert B., Jr., (Gerri), Dir., Univ. Relations 12 Holladay, Box 7505; 4912 Larchmont Dr., 27612	2850	782-5234
Lanier, Alicia L., (Sean Gurkin), Ext. Spec., Bio. & Agri'l. Engr. 109 Weaver Lab., Box 7625; 705-B West C. St., Butner 27509	2694	575-4969
Lanier, Dr. Tyre C., (Cheryl), Assoc. Prof., Food Sci. 236-D Schaub, Box 7624; Rt. 1, New Hill 27562	2964	362-6411
Lankford, Herman T., (Gail), Photog., Agri'l. Comm. G-1 Ricks Annex, Box 7603; 3208 Plantation Rd., 27608	2861	833-7741
LaPan, Diane B., (Denis Lee), Acct. Clk., Univ. Dining 217 Harris, Box 7307; 5423 Pine Top Circle, 27612	3090	782-7448
LaPasha, Dr. Constantine A., (Robin), Res. Tech., Wood & Paper Sci. 1020 Biltmore, Box 8005; 3002 Burton Rd., Durham 27704	3181	682-7712
Lapp, Dr. John S., (Linda), Assoc. Prof., Ec. & Bus. 201-D Patterson, Box 8109; 4305 Waterwheel Dr., 27606	3273	839-1044
Larick, Dr. Duane K., (Joanne), Asst. Prof., Food Sci. 339-D Schaub, Box 7624; 105 Haversham, Cary 27511	2971	469-3790
LaRock, Jeffery A., Detective, Public Safety Field House, Box 7220	2498	
Larson, Joan H., (Wilbur), Coord. of Advising, Elec. & Comp. Engr. 234 Daniels, Box 7911; 6201 Lewisand Ct., 27609	2336	847-4292
Larson, Karl E., Art.-Illus., Agri'l. Comm. G-4 Ricks Annex, Box 7603; 1608 Benehan St., 27605	2861	832-5169

Name, Title, Department and Address	Office Phone	Resid. Phone
Larson, Dr. Roy A., (Darlyne), Prof., Hort. Sci.	3132	851-3809
128 Kilgore, Box 7609; 1605 SuJohn Rd., 27607		
Laryea, Dr. Doris L., (Robert), Assoc. Prof., Engl.	3870	266-9919
235 Tompkins, Box 8105; Rt. 2, Box 65, Knightdale 27545		
Lasater, Roy M., Asst. Con. & Vend., Concessions	7809	266-6066
3805 Beryl Rd., Box 7307; 519 Colchester Dr., Knightdale, 27545		
Lassiter, Bette C., (Bill), Acct. Tech., SSS	2161	872-1670
SSS, Box 7224; 3809 Wecter Rd., 27604		
Lassiter, Billy G., Lab. Mech., Phyt.	2778, 2779	772-8123
2003 Gardner, Box 7618; 627 Winterlochen, 27603		
Lassiter, Dr. Charles A., (Robbie), Prof. & Head, Ani. Sci.	2755	467-4594
123 Polk, Box 7621; 138 Castlewood Dr., Cary 27511		
Lassiter, David G., Mach. Shop Supv., Elec. & Comp. Engr.	2336	832-2245
109 Daniels, Box 7911; 3201 Bedford Ave., 27607		
Lassiter, Glymis T., Hskp. Asst., Phys. Plant	3323	
Park Shops, Box 7219		
Lassiter, Leamon W., (Alice), Supv. Small Ani. Lab., Zool.	3218	553-4788
Small Ani. Facility, Ligon St., Box 7617; 203 Pineland Ave., Clayton 27520		
Lassiter, Lisa E., (Ricky), Clk., Comp. Ani. & Sp. Species Med., SVM ...	829-4200	
4700 Hillsborough St., Box 8401		
Lassiter, Louie T., (Nancy), Assoc. Dir. Text. Ext., Text. Mgmt. & Tech.	3149	787-2326
B21-A, Box 8301; 2722 Fairview Rd., 27608		
Latham, Patricia D., (Robert Q., Sr.), Sec., Fin. Aid.	2421	782-5832
213 Peele, Box 7302; 5401 North Hills Dr., 27612		
Lauffer, Dr. Richard A., (Carolyn), Head, Phys. Educ.	3361	851-2029
2002 Carmichael, Box 8111; 1600 Ridgeland Rd., 27607		
Laurie-Ahlberg, Dr. Cathy C., (Victor), Assoc. Prof., Gen.	2294	781-4595
3619 Gardner, Box 7614; 5305 Leadmine Rd., 27612		
LaVopa, Dr. Anthony J., (Patricia), Assoc. Prof., Hist.	2485	821-5543
115 Harrelson, Box 8108; 2715 Everett Ave., 27607		
Lawhorn, Milton (Ray) R., (Linda), Whse. Supv., Central Stores	2211	772-3810
Sullivan Dr., Box 7225; 301 Trail of Merlin, Garner 27529		
Lawing, Herman, (Esther), P. Carpenter., Phys. Plant	3323	781-0830
Park Shops, Box 7219; 8013 Leesville Rd., 27612		
Lawrence, Anthony W., Data Proc., Comp. Ctr.	2523	832-7982
2620 Hillsborough St., Box 7109; 718 Chamberlain St., 27607		
Lawrence, Cara D., Sec., Credit Union	2686	
2802 Hillsborough St., Box 8609		
Lawrence, Frances G., (Jarvis B.), Acct. Tech., Dean's Off., Sch. of Educ.	2231	772-4292
208 Poe, Box 7801; 1315 Sycamore Dr., Garner 27529		
Lawrence, Johnny M., (Hazel), Res. Tech., Min. Res. Lab	704-251-6155	704-684-9440
180 Coxe Ave., Asheville, 28801; 18 Arnstien Circle, Fletcher, 28732		
Lawrence, Leonard, Jr., (Gearline), Hskp. Supv., Phys. Plant	3323	851-6104
Park Shops, Box 7219; 1133 Clanton St., 27606		
Laws, James W., (Atsie), Res. Tech., Ent.	3391	596-2757
3709 Hillsborough St., Box 8604; 2301 Wintergreen Pl., Durham 27707		
Laws, Tillie A., Med. Lab. Tech., Vet. Teach. Hosp., SVM	829-4200	481-0930
4700 Hillsborough St., Box 8401; 515 Mayfair St., Cary, 27511		
Lawson, B. Thomas, Jr., Univ. Dev. Off., Development	7827, 7846	829-0813
7 Holladay, Box 7502; 804 W. Morgan St., Apt. A-3B, 27603		
Lawson, Ramona B., (Robert), Libr. Tech. Asst., Serials	3584	833-9119
G116B Library, Box 7111; 2109 Balboa Rd., 27603		
Layman, Linda D., (Michael), Data Entry Oper., Dairy Rec. Proc. Ctr.	2075	
123 Leazar, Box 7623; 1065-B North Main, Wake Forest, 27587		
Layton, Faith H., (Jerry), Acct. Clk. Supv., Accts. Payable	2158	859-0971
213 Admn. Serv. Ctr., Box 7204; 5217 Kaplan Dr., 27606		
Lea, Dr. Russ, (Robin), Assoc. Prof., For. Resou.	3674	782-7972
2023 Biltmore, Box 8002; 1700 Dixie Trail, 27607		
Leach, Andrew J., (Alberta), Hskp. Supv., Phys. Plant	3323	772-6164
Park Shops, Box 7219; 1514 Mechanical Blvd., Garner, 27529		
Leach, Barbara L., Clk.-Typ., Crop Sci.	3905	552-9323
3127 Ligon St., Box 7631; Rt. 1, Box 33, Holly Springs 27540		

Name, Title, Department and Address	Office Phone	Resid. Phone
Leach, Ernest, Hskp. Supv., Phys. Plant Park Shops, Box 7219; Rt. 10, Box 530-K, 27603	3323	772-9716
Leach, Dr. James W., Assoc. Prof., Mech. & Aero. Engr. 3173 Broughton, Box 7910; 8800 Trailing Cedars Dr., 27612	2365	848-0689
Leach, Mortimer (Buddy) L., (Dereuana), Stock Supv., Central Stores Sullivan Dr., Box 7225; 320 Sandy Run Dr., Knightdale 27545	3795	266-4778
Leach, Zola M., Hskp. Supv., Phys. Plant Park Shops, Box 7219; 519 E. Bragg St., 27610	3323	833-5688
Leager, Kay P., (Andrew), Asst. Dir., Admis. 107 Peele, Box 7103; 2605 Vanderbilt Ave., 27607	2437	832-2241
Leary, Robert, Lec., Lands, Arch. 310C Brooks, Box 7701; 11816 Possum Track Rd., 27614	2203, 2205	847-4411
Leary, Stanley M., (Blanche), Conslt. Engr., Bio. & Agri'l. Engr. 116 Weaver, Box 7625; 427 Oak Ridge Rd., Cary 27511	3101	467-1059
Leath, Dr. Steven, (Janet), Asst. Prof., Plant Path. 2422 Gardner, Box 7616; Rt. 3, Box 413B, Fuquay-Varina 27526	2721	552-7163
Leath, Virginia M., Asst. Prof., Phys. Educ. 2020 Carmichael, Box 8111; 301 Virginia Ave., Garner 27529	2487	772-3308
Leatherwood, Dr. James M., (Joyce), Prof. Emer., Ani. Sci. 4501 Leaf Ct., 27612		787-5569
Lebourgeois, J. Charless, Librn., Monographic Cat. 1121 Library, Box 7111	2603	
Lecce, Dr. James G., (Eileen), Prof., Ani. Sci. 319 Polk, Box 7626; 2729 Cambridge Rd., 27608	2019	787-5718
Lee, Anthony, Painter Apprentice, Phys. Plant Park Shops, Box 7219; 209 Millbrook Rd. #E, 27609	3323	848-8842
Lee, C. Anne, Patrol Off., Public Safety Field House, Box 7220	3206	
Lee, Charles W., Foreman, Spec. Events, Motor Pool Sullivan Dr., Box 7219; P.O. Box 631, Clayton, 27520	2179	
Lee, Christie L., (Thomas), Libr. Asst., Reserve Rm. Library, Box 7111; 1323 Dogwood Ln., 27607	2597	781-1960
Lee, David M., Agri'l. Res. Tech., Ani. Sci. 204 Polk, Box 7621; Rt. 3, Box 215-B, Zebulon 27597	2566	269-6202
Lee, Dorothy B., Clk.-Typ., Bio. & Agri'l. Engr. 203 Weaver, Box 7625; P.O. Box 2573, 27602	2675	833-8562
Lee, John H., (Edith), Lab. Mech., Text. Mgmt. & Tech. 323 Nelson, Box 8301; 305 Wren Ln., Clayton 27520	3077	553-5961
Lee, Dr. Joshua A., (Janice), Prof., Crop Sci. 1244 Williams, Box 7620; 5104 Newcastle Rd., 27606	2704	851-4469
Lee, Lewis M., (Stephanie), Elect., Phys. Plant Armory Shop, Box 7219; Rt. 9, Box 305, 27606	3080	772-9177
Lee, Maristene, Food Serv. Supv., Univ. Dining Dining Hall, Box 7307	3963	
Lee, Patricia J., (George), Coord., Merit Awards Prog., Stu. Aff. 205 Peele, Box 7302; 3505 Carriage Dr., 27612	3671	787-9406
Lee, Robyn G., Sgt., Public Safety Field House, Box 7220	3206	
Lee, Scott H.R., (Nancy), Capt., AFROTC 145 Reynolds Coliseum, Box 7308	2417	
Lee, Susan H., Acct., Contr. & Grants Leazar, Lower Level, Box 7214	2153	
Lee, Thomas W., Grounds Wkr., Phys. Plant Sullivan Dr., Box 7219; 1323 Dogwood Ln., 27607	3408	781-1960
Lee, Dr. William D., Assoc. Prof. Emer., Soil Sci. Williams; 318 Furches St., 27607		832-3930
Lee, Winnie R., Hskp. Asst., Phys. Plant Park Shops, Box 7219; B-37 Washington Terr., 27610	3323	832-2164
Lee, Yih J., Res. Asst., Poul. Sci. Mycotoxin Lab., Box 7608; 1214 Lorimer Rd., 27606	2729	859-1448
Leffler, Charles D., (Wanda), Asst. Vice Chanc. for Bus., Bus. Div. 203 Holladay, Box 7228	2146	848-1080
Legates, Dr. J. E., (Betty), WNR Prof., Ani. Sci. Polk, Box 7621; 1333 Trailwood Dr., 27606	2763	851-6831

Name, Title, Department and Address	Office Phone	Resid. Phone
Lehmann, Marc A., (Linda A. Favreau), Media Tech., Media Resou. Ctr.	3785	556-4586
125 Brooks, Box 7701; 12000-201 Falls of the Neuse Rd., Wake Forest, 27587		
Leidy, Dr. Ross B., (Nancy), Sr. Researcher, Ent.	3391	851-9165
3709 Hillsborough St., Box 8604; 5128 Norman Pl., 27606		
Leiter, Dr. Jeffrey C., (Carrie J. Knowles), Assoc. Prof., Soc. & Anth.	3114	833-6022
330 1911 Bldg., Box 8107; 201 Dixie Tr., 27607		
Leith, Dr. Carlton J., (Marian), Prof. Emer., Mar., Earth & Atmos. Sci.		408-663-5478
17960 Tanleaf Ln., Salinas, CA 93907		
Leith, Terri T., Lect., Engl.	3870	
232 Tompkins, Box 8105		
LeMay Betty C., Grad. Sec., Design	2204	787-0821
200 Brooks, Box 7701; 5429 Thayer Dr., 27612		
Leming, Michael L., (Martha), Lect., Civil Engr.	2331	851-2373
414 Mann, Box 7908; 1900 Fox Sterling Dr., 27606		
Lemons, Carol L., (Richard), Supv., Clin. Micro. Lab.		
Vet. Teach. Hosp., SVM	829-4311	851-1326
4700 Hillsborough St., Box 8401; 522 Oak Run Dr., 27606		
Lemons, Richard W., (Carol), Agri'l. Res. Tech., Crop Sci.	2867	851-1326
3123 Ligon St., Box 7627; 552 Oak Run Dr., 27606		
Lengnick, Laura L., (Fred), Agri'l. Res. Tech., Crop Sci.	3216	787-0576
4228 Williams, Box 7620; 1810 Oberlin Rd., 27608		
LeNoir, Penny, Lect., Math.	7178	821-2180
311 Harrelson, Box 8205; 613 Polk St., 27607		
Lentz, Dr. Vern B., Asst. Prof., Engl.	3854	821-1381
G-127 Tompkins, Box 8105; 607-D Daniels, 27605		
Leonard, Arthur E., (Jeanette P.), Litho Press Oper., Con. Educ.	3692	834-9533
138 McKimmon, Box 7401; 3205 Winfield Ct., 27610		
Leonard, Dolores H., Sys. Prog., Comp. Ctr.	2517	942-4511
B17-C Hillsborough Bldg., Box 7109; 480 Melanie Ct., Chapel Hill 27514		
Leonard, Ellen S., (Keith), Res. Analyst, Crop Sci.	2763	469-1474
210 Polk, Box 7621; 500 Ralph Dr., Cary 27511		
Leonard, Dr. Kurt J., (Maren), Prof., USDA, Plant Path.	2751	851-7567
3414 Gardner, Box 7616; 709 Merwin Rd., 27606		
Leonard, Dr. Rebecca, Asst. Prof., Speech-Comm.	2450	859-0452
207A Winston, Box 8104; 508 Merrie Rd., 27606		
Leonard, Verlen, Clk.-Typ., Phys. Plant	2180	
204 Morris, Box 7219; Rt. 2, Box 270, Spring Hope, 27882		
LePors, Laurie A., Res. Tech., Food Sci.	2965	779-1102
200 Schaub, Box 7624; 611 Springview Trail, Garner, 27529		
Lesser, Virginia M., Stat., Stat.	3311	834-3919
1509 Varsity Dr., Box 8203; 1616 Sunrise Ave., 27608		
Lester, Marsha R., Lect., Phys. Educ.	2487, 2488	859-1286
2016F Carmichael, Box 8111; 101 Lochview Dr., Cary 27511		
Leuba, Dr. Richard J., (Mary), Lect., Mech. & Aero. Engr.	3241	833-4287
4153 Broughton, Box 7910; 1515 Scales Rd., 27608		
Levedahl, Dr. J. W., (Sandy), Asst. Prof., Ec. & Bus.	2605	787-6910
10-B Patterson, Box 8109; 4105 Weaver Dr., 27612		
Levenbook, Dr. Barbara B., (Kenneth), Assoc. Prof. of Phil., Phil. & Rel.	3214	847-1862
G115 Winston, Box 8103; 501 St. Andrews Ct., 27609		
LeVere, Dr. Thomas E., (Nancy), Prof., Psy.	2252	847-1210
762-B Poe, Box 7801; 7708 Moorgate Ct.		
Levesque, Alpha N., Libr. Tech. Asst., Monographic Cat.	2603	362-0519
1121 Library, Box 7111; 107 Mason St., Apex 27502		
Levi, Dr. Michael P., (Pat), Prof., Spec. In-Charge, Ext. For. Resou.	3386	851-3933
3036-D Biltmore, Box 8003; 4909 Liles Rd., 27606		
Levi, Dr. Patricia E., (Michael), Res. Assoc., Ent.	2275	851-3933
Unit 4, Method, Box 7633; 4909 Liles Rd., 27606		
Levin, Dr. Harold D., (Constance), Assoc. Prof., Phil. & Comp. Sci., Phil. & Rel. & Comp. Sci.	3214	848-3194
115 Winston, Box 8103; 6208 Lakerun Ct., 27612		
Levin, Dr. Lisa A., Asst. Prof., Mar., Earth & Atmos. Sci.	7840	755-1007
139 Withers, Box 8208; 2712 Kilgore Ave., 27607		
Levine, Cynthia R., Librn., Ref.	2935	828-1214
1121 Library, Box 7111; 2606½ Clark Ave., 27607		

Name, Title, Department and Address	Office Phone	Resid. Phone
Levine, Dr. Jack, Prof. Emer., Math.	3258	834-0876
220 Harrelson, Box 8205; 2731 Rosedale Ave., 27607		
Levine, Dr. Jay F., (Zena), Asst. Prof., Micro., Path., & Parasit., SVM	829-4397	851-9086
4700 Hillsborough St., Box 8401; 1504 Princess Anne Dr., 27607		
Levine, Dr. Joseph, Asst. Prof. of Phil., Phil. & Rel.	3214	
G-107 Winston, Box 8103		
Levine, Dr. Samuel G., (Pearl), Prof., Chem.	2863	489-9257
436 Dabney, Box 8204; 1609 Ward St., Durham 27707		
Levings, Dr. Charles S., III, (Catherine), Prof., Gen.	2289	851-3225
2526 Gardner, Box 7614; 3726 Swift Dr., 27606		
Levy, Dr. Jack B., Adj. Prof., Text. Chem.		
Chem. & Phys. Sci., UNC-Wilmington, 28403-3297		
Levy, Dr. Michael G., (Suzanne), Assoc Prof., Micro., Path. & Parasit., SVM	829-4293	847-2170
4700 Hillsborough St., Box 8401; 1804 Lake Park Dr., 27612		
Lewis, Charles F., (Ethel E.), Asst. Prof. Emer., Math.	3320	833-4539
211 Harrelson, Box 8205; 218 E. Park Dr., 27605		
Lewis, Edward T., (Alene), Elect., Phys. Plant	3080	897-5024
Armory Shop, Box 7219; Rt. 1, Box 244-A, Coats, 27521		
Lewis Elizabeth M., Admn. Asst., Human Resou.	2973	876-9362
Admn. Serv. Ctr., Box 7210; 3813-A Bonneville Ct., 27604		
Lewis, Frances C., Admn. Sec., Athl.	2104	467-9138
Case Athl. Ctr., Box 8501; 504 Heater Dr., Cary 27511		
Lewis, Helga E., Libr. Asst., Libr., Reserve Rm.	2597	467-2665
Library, Box 7111; 1317 Kingston Ridge Rd., Cary 27511		
Lewis, Jeri H., (Bill), Acct. Clk., Phys. Plant	2180	
209-B Morris, Box 7219		
Lewis, Karen H., (Tony), Acct. Clk., Phys. Plant	2180	
209D Morris, Box 7219; 409 Drolmond Dr., 27609		
Lewis, Lexie L., (Bobby), Clk.-Typ., Ani. Sci.	592-7161	592-7073
Box 303-C, E. Rowan Rd., Clinton 28328; P. O. Box 452, Clinton 28328		
Lewis, Mary C., Food Serv. Supr., Univ. Dining	3270	
Erdahl-Cloyd Annex, Box 7307; Rt. 1, Box 260, Coats, 27521		
Lewis, Melanie K., Clk.-Recept., Health Serv.	2562	834-3704
Clark Inf., Box 7304; 1108 Carlisle St., 27610		
Lewis, Polly F., Comp. Oper., Comp. Ctr.	2517	266-2383
127 Hillsborough Bldg., Box 7109; Rt. 3, Box 193, Knightdale 27545		
Lewis, Robert M., (Billie), Sr. Min. Engr., Min. Res. Lab 180 Coxe Ave., Asheville, 28801	704-251-6155	
15 Valley View Dr., Candler, 28715	704-667-4324	
Lewis, Dr. Thomas A., Res. Assoc., Microb.	7850	878-8469
4626 Gardner, Box 7615; 4609-D Grindingsstone Dr., 27604		
Lewis, Dr. William M., (Marie), Ext. Spec. & Prof., Crop Sci., Weed Sci. Ctr.	2594	787-1088
4401C Williams, Box 7620; 4725 Rembert Dr., 27612		
Lewter, Penny G., Sec., UNC Sea Grant	2454	831-9712
105 1911 Bldg., Box 8605; 2502 Clark Ave. Apt. 4, 27607		
Ley, Dr. David H., (Heidi Baird), Asst. Prof., Food Ani. & Equ. Med., SVM	829-4269	469-0795
4700 Hillsborough St., Box 8401; 106 Brodich Ct., Cary 27511		
Liacos, James A., Res. Tech., Anat., Physiol. Sci. & Radiol., SVM	829-4325	
4700 Hillsborough St., Box 8401		
Liao, Shiow-Bih, (Sam), Prog. Analyst, Agri'l. Ext.	2983	848-0121
110 Brooks Ave., Box 7602; 2008 Countrywood Rd., 27609		
Lichtenwalner, Dr. Richard E., (Joanne), Assoc. Prof., Ani. Sci.	793-4118	482-4965
Tidewater Res. Sta., Rt. 2, Box 141, Plymouth 27962; Rt. 2, Box 245, Edenton 27932		
Lieber, Marcia E., Res. Tech., Soil Sci.	2636	
3319 Williams, Box 7619		
Liebowitz, Dr. Stanley J., (Vera), Assoc. Prof., Ec. & Bus.	3273	
201 Patterson, Box 8109		
Likavec, Karen A., Vet. Tech., Vet. Teach. Hosp., SVM	829-4200	
4700 Hillsborough St., Box 8401		

Name, Title, Department and Address	Office Phone	Resid. Phone
Liles, Larry D., Capt. Dep. Dir., Oper., Public Safety Field House, Box 7220	3206	
Liles, Dr. Richard T., (Jeanine), Assoc. Prof., State Ldr. of Trng., Agri'l. Ext. Serv., Adult & Comm. Coll. Educ. 113 Ricks, Box 7607; 4800 Kaplan Dr., 27606	2819	
Lilley, Dr. Stephen C., Assoc. Prof., Ext. Soc. Spec., Soc. & Anth. 239 1911 Bldg., Box 8107	2670	
Lilly, J. Paul, (Susan), Assoc. Ext. Prof., Soil Sci. Tidewater Res. Sta., Rt. 2, Box 141, Plymouth 27962; 312 Hampton Dr., Plymouth 27962	793-4118	793-2088
Lim, Dr. P. K., Assoc. Prof., Chem. Engr. 208 Riddick, Box 7905; 3906-C Lexington Dr., 27606	2328	833-6250
Linderman, Dr. Russell J., (Diane), Asst. Prof., Chem. 514 Dabney, Box 8204; 4516 Wenchelsea Pl., 27612	3616	781-2269
Lindsey, Doris J., Laun. Wkr., Laun. Laundry, Box 7218; 1043 Raleigh Blvd.	2122	834-6477
Lineback, Dr. David R., Prof. & Head, Food Sci. 100 Schaub, Box 7624; 8713 Catamaran, 27609	2951	847-8165
Lineback, Patricia L., (Dave), Sec., Rec. Resou. Admin. 4004 Biltmore, Box 8004; 8713 Catamaran, 27609	3276	847-8165
Lineberger, Paul N., Res. Unit Mgr., Hort. Sci. 104 Hort. Sci. Grnhse., Box 7609; 6109 Buffaloe Rd., 27604	2685	872-5652
Liner, Dr. Hugh L., (Mary), Dist. Ext. Chm., Agri'l. Ext. Serv. 307 Ricks, Box 7604; 3720 Eakley Ct., 27606	2789	851-0372
Liner, Mary M., (Hugh), Acct. Tech., Agri'l. Res. Admin. 120 Patterson, Box 7601; 3720 Eakley Court, 27606	2714	851-0372
Link, Margaret A., Coord., Librn., Curr. Mat. Ctr., Sch. of Educ. 400 Poe, Box 7801; 2129 Ridge Rd., 27607	3191	781-4079
Linker, Dr. H. Michael, (Claire), Ext. IPM Coord., Crop Sci. 4401A Williams, Box 7620; 3613 Penny Ct., 27606	2594	832-1605
Linnerud, Dr. Ardell C., (Palma), Assoc. Prof., Stat. 510 Cox, Box 8203; 1309 Deboy St., 27606	2585	851-5752
LioRET, E. Kent, (June), Vis. Lect., For. Lang. 137 1911 Bldg., Box 8106; 102 South Christopher Rd., Chapel Hill 27514	2475	942-1742
Lisk, Pamela K., Med. Lab. Tech., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401	829-4310	
Little, Donna B., Res. Tech., Gen. 840 Method Rd., Unit #4, Box 7633; P.O. Box 19801, 27619	7931	781-9155
Little, Helen W., Comp. Oper. Mgr., Comp. Ctr. 127 Hillsborough Bldg., Box 7109; 616 S. Barbour St., Clayton 27520	2517	553-7631
Little, Joan M., (John), Admn. Sec., Phyt./SALS 2002 Gardner, Box 7618; 4201 Windsor Pl., 27609	2778, 2779	781-0829
Little, Dr. Trevor J., (Bobbie), Assoc. Prof., Text. Mgmt. & Tech. 132 Nelson, Box 8301; 5216 Coronado Dr., 27609	3890	782-4695
Littleton, Dr. Isaac T., (Dorothy), Dir. of Libr. 1208 Library, Box 7111; 4813 Brookhaven Dr., 27612	2843	787-4786
Liu, Joyce C., Res. Tech., Biochem. 332 Polk, Box 7622; 5113 Bridlington Ln., 27612	2581	782-2027
Liu, Dr. Wentai, (Mary), Asst. Prof., Elec. & Comp. Engr. 330 Daniels, Box 7911; 1406 Bloomingdale Dr., Cary 27511	2336	469-3122
Livengood, Dr. Charles D., (Mary), Prof. & Head, Text. Chem. 115 Clark, Box 8302; 5229 Leiden Ln., 27606	2551	362-1639
Livingood, Joan L., Sec., Ec. & Bus. 306 Hillsborough Bldg., Box 8110; A-6 106 Harlon Dr., Cary, 27511	2472	469-4641
Llewellyn, Robert W., (Margaret), Emer. 2429B Wycliff Rd.		782-3535
Lloyd, Faye J., (Ben T.), Sec., Ent. 840 Method Rd. Unit IV, Box 7633; 2913 Wicklow Pl., 27604	2274	876-2430
Lloyd, Janice H., (Thomas), Spec., Fam. Resou. Mgmt., Agri'l. Ext. F-2 Ricks Annex, Box 7605; 3106 Westbury Dr., 27607	2770	782-1381
Loadman, Beth M., Catering Coord., Univ. Dining B-116 Univ. Stu. Ctr., Box 7307	2021	
Locke, Dr. Don C., (Marjorie), Assoc. Prof., Counselor Educ. 520 K Poe, Box 7801; 1509 Shelley Rd., 27612	2244	781-4714

Name, Title, Department and Address	Office Phone	Resid. Phone
Lockehart, Shirley S., (Edward Lee), Supv., Univ. Dining Erdahl-Cloyd Annex, Box 7307; 913 Newcombe Rd., 27610	3270	828-8766
Lockley, Chandra E., Libr. Asst., Acqs., Libr. 3122 Library, Box 7111	3187	834-4575
Loeppert, Dr. Richard H., (Adeline), Prof. Emer., Chem. Box 8204; 1317 Rand Dr., 27608		787-5111
Lomack, Charles L., Boiler Oper., Phys. Plant Heating Plant, Box 7219; Rt. 3, Box 67-A, Wendell, 27591	2184	365-4292
Lomperis, Dr. Linda S., Asst. Prof., Engr. 269 Tompkins, Box 8105; 402-1 Horne St., 27607	3870	
Long, Brenda W., Sec., Nuc. Engr. 2116 Burlington, Box 7909; 800 Dixie Tr., 27607	2530	821-5671
Long, Dr. G. Gilbert, (Ann), Prof., Chem. 745 Dabney, Box 8204; 2701 Kilgore Ave., 27607	2948	828-4952
Long, Dr. Larry W., Assoc. Prof., Speech-Comm. 224 Winston, Box 8104	2450	
Long, Penelope N., Lect., Speech-Comm. 203-A Winston, Box 8104	3204	
Long, Dr. Raymond C., (Marie), Prof., Crop Sci. 4310 Williams, Box 7620; 1605 Westbridge Ct., 27606	3216	851-3664
Long, Sotello V., (Dee), Asst. Dir., Admis. 112 Peele, Box 7103; 3931-C Marcom St., 27606	2437	839-0977
Long, Teresa A., Sec., Ec. & Bus. 220 Patterson, Box 8109; 5120 B Vann St., 27606	2608	851-0756
Longmire, Peggy B., (Michael), Res. Spec., Soil Sci. 3225 Williams, Box 7619; 609 Ramona Rd., 27606	3617	851-3990
Longmuir, Dr. Ian S., (Shirley), Prof., Biochem. 135 Polk, Box 7622; 2408 Tyson St., 27612	2581	787-8499
Lord, Dr. Peter R., (Mavis), Prof., Text. Engr. & Sci. 201-C Nelson, Box 8301; 3116 Monticello Dr., 27612	3481	787-5720
Lorscheider, Mary R., (James Britt), Agri'l. Res. Tech., Hort Sci. 59 Kilgore, Box 7609; Rt. 1, Box 125AA, Morrisville 27560	3346	469-3830
Loseke, Beverley T., (Warren), Libr. Asst., Acqs.-Ser. 3110-B Library, Box 7111; 3317 Churchill Rd., 27607	3188	787-0372
Lott, Shelby L., (Linda), Stock Supv., SSS SSS, Box 7224; Rt. 1, Box 242-C, Holly Springs 27540	2164	
Louden, Linda, (Mark), Ship. & Rec. Clk., SSS SSS, Box 7224	2161	
Louden, Mark, Patrol Off., Public Safety Field House, Box 7220	3206	
Loughridge, Nancy S., Res. Tech., Ani. Sci. 237 Polk, Box 7621; 3809-B Marcom St., 27606	2503	834-7613
Love, Dr. Carolyn S., (William), Asst. Prof., Rec. Resou. Admin. 4004A Biltmore, Box 8004; 2824 Sourwood Dr., 27610	3276	833-2342
Love, Dr. Joseph W., (Harriette Pritchard), Ext. Prof., Hort. Sci. 124 Kilgore, Box 7609; 3704 Eakley Ct., 27606	3322	851-0577
Love, Wanda W., Sec., Ani. Sci. Wilkes Co. Office Bldg., Wilkesboro 28697; Box 205, Laurel Mtn. Rd., North Wilkesboro 28659	651-7337	667-1994
Lovvorn, Dr. Roy L., (Virginia), Dir. & Prof. Emer., Crop Sci. 302 Springmoor Dr., 27609		848-7302
Lowe, William C., (Irene), Asst. Dir., Ref. Serv. 1128 Library, Box 7111; 4708 Woodridge Dr., 27612	2935	787-5743
Lowery, Marilyn V., (Ronnie), Acct. Clk., Admin. Serv., Engr. 101 Page, Box 7901; 6300 Ansley Ln., 27612	3329	848-1269
Lowrey, Austin, (Lida), Prof., Visual Design 319-C Brooks, Box 7701; 3300 Morningside Dr., 27607	3785	781-7833
Loyd, Edsel R., (Enzull Dianne), Maint. Mech., Phys. Plant Park Shops, Box 7219; 2709 Newbold St., 27603	3323	832-6919
Lubkeman, Dr. David L., Asst. Prof., Elec. & Comp. Engr. 404 Daniels, Box 7911; 4131 The Oaks Dr., 27606	2336	851-2860
Lucas, Calvin, Hskp. Asst., Phys. Plant Park Shops, Box 7219	3323	

Name, Title, Department and Address	Office Phone	Resid. Phone
Lucas, Dr. George B., (Vernelle), Univ. Contact Off. for Int'l. Vis.; Prof. Emer., Plant Path., Dean's Off., Agri. & Life Sci.	2818, 2751	787-5985
3418 Gardner, 110 Patterson, Box 7601; 3040 Churchill Rd., 27607		
Lucas, Dr. Leon T., (Joy), Prof., Plant Path.	2751	851-2341
3409 Gardner, Box 7616; 601 Old Farm Rd., 27606		
Lucas, William H., Engr. Aide, Phys. Plant	2184	266-4950
7-C Morris, Box 7219; Rt. 2, Box 165, Knightdale 27545		
Lucovsky, Dr. Gerald, (Roberta), Prof., Physics	2515	467-6712
406E Cox, Box 8202; 910 Queensferry Rd., Cary 27511		
Luginbuhl, Dr. Geraldine H., (Jim), Assoc. Prof., Microb.	7484	828-5933
4608B Gardner, Box 7615; 116 E. Park Dr., 27605		
Luginbuhl, Dr. James E. R., (Geraldine), Assoc. Prof., Psy.	2252	828-5933
749 Poe, Box 7801; 116 E. Park Dr., 27605		
Luh, Dr. Jiang, (Tsu-yunn), Prof., Math.	3261	848-3805
226 Harrelson, Box 8205; 8908 Woodvine Ct., 27612		
Luh, T.M., (Jiang), Instr., For. Lang.	2475	848-3805
126A 1911 Bldg., Box 8106; 8908 Woodvine Ct., 27612		
Lundberg, Ferdinand, Extrusion Lab. Mgr., Text. Chem.	3074	779-2626
B38 Nelson, Box 8301; 103 November St., Garner 27529		
Lunsford, Dianne S., Clk., Dairy Rec. Proc. Ctr.	7828	563-3402
Leazar, Box 7623; Rt. 2, Box 350, Efland 27243		
Lunsford, Larry W., Telecomm. Off., Public Safety	3206	
Field House, Box 7220		
Luo, Dr. Ren C., (Lan-Chien), Asst. Prof., Elec. & Comp. Engr.	2336	467-3461
328A Daniels, Box 7911; 1121 Ivy Lane, Cary 27511		
Lyday, Dr. Susan Y., Ext. Pers. Dev. Spec., Agri'l Ext. Serv.	2814	834-2745
109 Richards, Box 7602; 652 Chappell Dr., 27606		
Lyde, Charles, Gen. Utility Wkr., Phys. Plant	3408	829-1717
Sullivan Dr., Box 7219; 725 Grantland Dr., 27602		
Lyle, Dr. M. Lynn, Univ. Dev. Off., Development	7017	839-8381
732 Poe, Box 7801; 700 N. East St., 27604		
Lynch, Debra J., (William), Clk.-Typ., UNC Sea Grant	2454	284-4413
105 1911 Bldg., Box 8605; Rt. 2, Box 266, Kenly 27542		
Lynch, George F., Admn. Serv. Supt., Phys. Plant	2180	467-5074
200-C Morris, Box 7219; 1213 Collington Dr., Cary 27511		
Lynch, Juanita T., (Percy), Acct. Clk., Phys. Plant	2188	553-5219
209 Morris, Box 7219; 2401 Johnston Union Rd., Clayton, 27520		
Lynch, Linda M., (Robert), Sec., Crop Sci.	2661	782-2592
4123 Williams, Box 7620; 816 Macon Pl., 27609		
Lynn, Joseph T., (Aileen), Prof. Emer., Physics		787-5925
Box 8202; 400 Lake Boone Tr., 27608		
Lyons, Patricia, Hskp. Asst., Phys. Plant	3323	832-8783
Park Shops, Box 7219; 1004 Bunche Dr., 27610		
Lytle, Dr. Charles F., (Carol), Prof., Zool., Coord., Bio. Sci.	3341	467-8746
2717A Bostian, Box 7611; 406 Kent Dr., Cary 27511		

M

Maas, Dr. Richard P., (Susan), Ext. Spec., Bio. & Agri'l. Engr.	3723	596-9870
622 Downtown Blvd., Box 7625; 924 Lynn Rd., Durham 27703		
Macdonald, Bruce L., Dep. Dir., Life Safety Serv., Public Safety	2568	
Field House, Box 7220		
MacDonald, Carl W., Storer. Mgr., SVM	829-4200	
4700 Hillsborough St., Box 8401		
MacDonald, Eva C., (Edward), Acct. Tech., Agri'l. Res. Admin.	2714	848-0601
108 Patterson, Box 7601; 6707 Brookmeade Pl., 27612		
Mack, Dr. Julia, Vis. Lect., For. Lang. & Lit.	2475	878-6628
135A 1911 Bldg., Box 8106; 5513 Edington Lane, 27604		
MacKay, Annette M., (William), Res. Tech., Plant Path.	2735	872-6659
2610 Gardner, Box 7616; 5725 Riverford St., 27604		

Name, Title, Department and Address	Office Phone	Resid. Phone
Mackay, Dr. William J., (Annette), Res. Assoc., Gen. 3624 Gardner, Box 7614; 5725 Riverford Dr., 27604	2294	872-6659
Mackenzie, Dr. John M., Jr., (Levita), Assoc. Prof., Microb., Coord., Ctr. for Electron Micros.	2664	
1543 Gardner, Box 7615; 8013 Brown Bark Pl., 27609		
MacKethan, Dr. Lucinda H., (John), Prof., Engl.	3353	782-3749
237 Tompkins, Box 8105; 2904 Augusta Ct., 27607		
MacLachlan, Dr. James N., (Lettie), Asst. Prof., Micro., Path., & Parasit.-SVM	829-4274	467-4519
4700 Hillsborough St., Box 8401; 1412 Creek Stone Ln., Cary 27511		
Macoosh, Asnat, Vis. Instr., Comp. Sci.	2858	781-3281
122 Daniels, Box 8206; 1225½ Duplin, 27607		
MacPhail-Wilcox, Dr. Bettye, (Milton "Will" Wilcox), Asst. Prof., Educ. Ldrship. & Prog. Eval.	3127	469-2258
608-N Poe, Box 7801; 1129 Ivy Ln., Cary 27511		
Maday, Dr. Clarence J., (Margie), Assoc. Prof., Mech. & Aero. Engr.	3024	
2414 Broughton, Box 7910; 524 Blakewood Dr., 27609		
Maddox, Sandra J., Agri'l. Res. Tech., Soil Sci.	2600	772-4804
3407 Williams, Box 7619; Rt. 3, Box 346, 27603		
Maddrey, Hazel "Mac", (James T.), Bldg. Liaison, UNC Ctr. for Pub. TV ...	2853	787-1876
202 TV Ctr., Box 8601; 4218 Arbutus Dr., 27612		
Madren, Margaret J., (Paul), Teach. Tech., Bio. Sci.	3341	467-7065
2717 Bostian, Box 7611; 111 Woodland Dr., Cary 27511		
Magat, Dr. Eugene E., Adj. Prof., Text. Chem.		
109 Forest Ridge Dr., Chapel Hill 27514		
Magill, Dr. John W.,		485-6440
1065-A Hickory St., Fayetteville 28303		
Magill, Dr. Michele M., Asst. Prof., For. Lang.	2475	942-3583
130 1911 Bldg., Box 8106; 57 Red Pine Rd., Chapel Hill 27514		
Magor, Dr. James K., (Doreene), Prof. Emer., Mat. Engr.		489-4040
3555 Hamstead Ct., Durham 27707		
Mahaffee, James D., (Mary), Tech. Photographer, Engr. Res. Serv. Div.	2348	787-7075
2139 Burlington, Box 7903; 5917 Dixon Dr., 27609		
Maidon, Carolyn H., (Charles), Asst. Affirm. Act. Off.	3148	
Provo. Off., Box 7101		
Maimone, Robert A., (Nancy), Lab. Res. Spec., For. Resou.	3596	787-7482
Res. Annex West-Bldg. B, Box 8007; 1628 Dixie Tr., 27607		
Main, Dr. A. Russell, Prof., Biochem.	2581	781-4854
128-D Polk, Box 7622; 4315 Leesville Rd., 10G, 27612		
Main, Dr. Charles E., (Jane), Prof., Plant Path.	2735	787-4446
1515 Gardner, Box 7616; 200 Westridge Dr., 27609		
Main, Raila E., Acct. Clk., Stat.	2529	783-8340
107 Cox, Box 8203; 4110-306 Sedgewood Dr. 27612		
Mainland, Dr. Charles M., (Dolores), Prof., Hort. Sci.	675-2314	791-2565
Hort. Crops Res. Sta., Castle Hayne 28429;		
237 Oakcrest Dr., Wilmington 28403		
Mair, Kevin D., Patrol Off., Public Safety	3206	
Field House, Box 7220		
Majewski, Ellen D., (Ed), Pers. Asst., Pers., Agri'l. Ext.	2820	469-9734
306 Ricks, Box 7602; 1302 Greenwood Cir., Cary 27511		
Majewski, Karen M., Lect., Engl.	3854	829-1479
G-103-B Tompkins, Box 8105; 516 Phelps Ave., 27607		
Major, Donald T., II, Analyst Programmer, Comp. Graphics Ctr.	3430	831-9618
342 Daniels, Box 7106; 3707 Burt Dr., 27606		
Malami, Linda S., (Ralph), Coord., Prov. Off.	2199	872-2652
M-6 Link Bldg., Box 7110; 5005 Quail Hollow Dr., 27609		
Malaxecheverria, Dr. Coro, Asst. Prof., For. Lang.	2475	929-7709
117 1911 Bldg., Box 8106; 41 Cedar Terrace Rd., Chapel Hill 27514		
Malcom, Dr. H. Rooney Jr., (Nona), Assoc. Prof., Civil Engr.	2331	851-4792
413 Mann, Box 7908; 3609 Octavia St., 27606		
Malinowski, Dr. Arlene, (Ed), Assoc. Prof., For. Lang.	2475	833-5154
130B 1911 Bldg., Box 8106; 2300 Avent Ferry Rd. L-6, 27606		

Name, Title, Department and Address	Office Phone	Resid. Phone
Malinski, Brenda L., Clk.-Typ., Info. Serv.	3470	779-7225
219 Oberlin Rd., Box 7504; 905 7th Ave. 42B, Garner, 27529		
Mallard, Patricia A., (Virgil), Sec., Ec. & Bus.	2605	365-6065
6 Patterson, Box 8109; 228 Forest Ln., Wendell 27591		
Mallette, Dr. Bruce I., Inst'l. Res. Off., Inst'l. Res.	2776	781-5971
202 Peele, Box 7002; 4100-106 Sedgewood Dr., 27612		
Malloy, Denise, M., Admn. Asst., Stu. Aff.	2405	847-4750
Thompson Thea., Box 7305; 920 Bennington Dr., 27609		
Malloy-Hanley, Dr. Erin K., Vis. Lect., Univ. Stud.	2479	782-5367
139 Harrelson, Box 7107; 3421 Bradley Pl., 27607		
Malpass, Sandra L., Data Entry Oper., Comp. Ctr.	2517	
Hillsborough Bldg., Box 7109; 1220 J. R. Dr., Garner 27529		
Malpiedi, Dr. Barbara J., Asst. Prof., Agric. Educ., Occup. Educ.	2234	779-7628
602 K Poe, Box 7801; 215 Withorne Dr., Garner, 27529		
Malstrom, Carl W., (Sue), Dir., Comp. Ctr.	2517	467-1716
M-2 Hillsborough Bldg., Box 7109; 304 Arrundale Dr., Cary 27511		
Mandato, Jackie, Pavr. Clk., Pavr. & Ben.	2151	859-1642
Admn. Serv. Ctr., Box 7215; 5113 Lundy Dr., 27606		
Mandell, Dr. Lee M., (Martha), SDG Mgr., Urb. Aff.	2578	851-7591
263 McKimmon, Box 7401; 5124 Melbourne Rd., 27606		
Maness, Eleanor P., (Charles), Res. Analyst, Hort. Sci.	3166	469-0986
225 Kilgore, Box 7609; 1900 Piney Plains Rd., 27606		
Mangum, James W., Laborer, Phys. Plant	3408	365-3184
Sullivan Dr., Box 7219; Rt. 2, Box 572A, Wendell, 27597		
Mangum, Lance C., (Vickie), Elec. Tech., Mech. & Aero. Engr.	3024	552-4505
1220 Broughton, Box 7910; 109 E. Lakeside Dr., Fuquay-Varina 27526		
Mangum, Royelle O., Rad. Sur. Supv., Rad.	2894	772-4828
214 Clark, Box 7108; White Oak Rd., Garner 27529		
Mangum, William D. III, (Donna), Agri'l. Res. Tech. Crop Sci. Tob. Res. Lab., Rt. 2, Box 16-G, Oxford 27565		693-5151 693-1755
Rt. 1, Box 175B, Oxford 27565	3408	269-9348
Mangum, William G., (Joyce), Asst. Supt., Phys. Plant Phys. Plant, Box 7219; Rt. 3, Zebulon, 27597		
Mangum, Wyatt A., Agri'l Res. Tech., Ent.	2003	851-0963
Varsity Dr., Box 7626; 120 Forestwood Dr., Durham, 27707		
Mani, Dr. K. V., (Anne), Reac. Health Physicist & Lect., Nuc. Engr.	3385	467-2504
1114 Burlington, Box 7909; 812 N. Harrison Ave., Cary 27511		
Mann, Ann F., (Joe), Coord., Acad. Support Serv., Acad. Skills Prog.	3163	781-4908
528-A Poe, Box 7105; 2319 Gaddy Dr., 27609		
Mann, Carroll L., Jr., Prof. Emer., Civil Engr.		787-6086
208 Mann, Box 7908; 1412 Canterbury Rd., 27608		
Mann, David E., (Cindy), Agri'l. Res. Tech., Ent. Ext.	2003	772-6995
1403 Varsity Dr., Box 7613; Rt. 1, Box 41, Apex 27502		
Mann, Dr. Thruston J., (Lela), Prof. Emer., Gen. & Crop Sci.		787-6041
5412 Sharpe Dr., 27612		
Mann, Kenneth M., (Lynn), Res. Tech., Poul. Sci.	2623	365-3729
118 Scott, Box 7608; 7105 Turnipseed Rd., Wendell, 27591		
Manning, Edward G., (Anne), Assoc. Prof. Emer., Elec. & Comp. Engr.	2336	782-1696
405 Daniels, Box 7911; 2913 Anderson Dr., 27608		
Manning, Linwood, Hskp. Asst., Phys. Plant	3323	
Park Shops, Box 7219; 533 Brantham Dr., 27605		
Manning, Dr. Thomas O., Asst. Prof. Derm., Comp. Ani. & Sp. Species Med., SVM	829-4232	782-8923
4700 Hillsborough St., Box 8401; 7408 Ebenezer Church Rd., 27612		
Manshack, Donny C., (Joyce), Grnhse. Wkr., Hort. Sci.	2685	833-4264
Hort. Sci. Grnhse., Box 7609; 704 E. Franklin, 27604		
Manson, Dr. Allison R., (Linda), Prof. Stat.	2532	782-5139
614-D Cox, Box 8203; 4020 Woodbine Rd., 27612		
Mantini, Michael J., Instrumentation Tech., Physics	2474	851-7254
45 Dabney, Box 8202; 2804 Avent Ferry Rd., 103, 27606		
Manuel, Carolyn E., Data Entry Oper., Trans.	2120	
Admn. Serv. Ctr., Box 7221; 306 Acorn St., 27604		
Marcom, Margaret P., (W. G.), Clk., Stat.	2544	894-4544
214 Dabney, Box 8203; Rt. 1, Box 206 C, Angier 27501		

Name, Title, Department and Address	Office Phone	Resid. Phone
Margolis, Nancy H., (Stephen E.), Lect., Engl. 106 Tomplins, Box 8105; 1504 Windbur Pl., 27609	3854	876-6253
Margolis, Dr. Stephen E., (Nancy), Assoc. Prof., Ec. & Bux. 318-D Hillsborough Bldg., Box 8110; 1504 Windbur Pl., 27609	3041	876-6253
Marion, Elizabeth M., (Jim), Sec., Phys. Plant 10 Morris, Box 7219; 1205 Willowbrook Dr., Cary 27511	2184	469-1168
Marion, Dr. James E., (Elizabeth), Prof. & Head, Poul. Sci. 120 Scott, Box 7608; 1205 Willowbrook Dr., Cary, 27511	2626	469-1168
Mark, Dr. Herman F., Adj. Prof., Text. Chem. Polytech. Inst. of N.Y., 333 Jay St., Brooklyn, N.Y. 11201	212-643-2486	
Markert, Dr. Clement L., (Margaret), Distinguished Univ. Res. Prof., Ani. Sci. 231 Polk, Box 7621; 7308 Mevan Ct., 27612	2223	783-6520
Marks, Luther A., (Patricia), Boiler Oper., Phys. Plant 4700 Hillsborough St., Box 8401; Rt. 1, Box 604, Moncure, 27559	829-4216	362-6975
Marler, Charles E., Litho., Univ. Graphics Sullivan Dr., Box 7226; 605 W. Church St., Benson 27504	2131	894-4752
Marlin, Dr. Joe A., (Corinne), Prof. & Asst. Head in Charge of Scheduling, Math. 306 Harrelson, Box 8205; 3432 Leonard St.	3796	787-5757
Marmarose, Vicki L., Dir., Stewart Thea., NCSU Ctr. Stage 1st Fl., Univ. Stu. Ctr., Box 7306; 4281 The Oaks Dr., 27606	3927	
Marseglia, Frank J., Locksmith, Phys. Plant 8 Park Shops, Box 7219	3323	
Marsh C. Paul, (Margaret), Prof., Soc. & Anth. 227 1911 Bldg., Box 8107; 1213 Duplin Rd., 27607	2491	787-9548
Marsh, Jr., Clarence, (Margaret), Res. Tech., Ani. Sci. Reprod. Phys. Lab., 1400 Blue Ridge Rd., Box 7621; 12648 Scenic Way, 27614	2673	847-5593
Marsh, Connie J., (Billy), Supv., Rad., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 309 Denise Dr., Cary 27511	829-4200	772-9753
Marsh, Paul L., (Betty), Asst. Stat., Stat. 509-A Cox, Box 8203; 1529 N. King Charles Rd., 27610	2584	828-4292
Marshall, Flossie, Food Serv. Supv., Univ. Dining Dining Hall, Box 7307; 6030 Colonial Dr., 27603	3963	772-2106
Marshall, Henry V., Jr., (Mae), Supt. In Charge, Univ. Res. Units 3 Patterson, Box 7601; 4100 Pepperton Dr. 27606	2823	851-4976
Marshall, Dr. Jon C., (Sharon), Assoc. Prof., Educ'l. Ldrship. & Prog. Eval. 608-M Poe, Box 7801; 300 Northfield Dr., 27609	3127	787-2130
Marshall, Karen L., (Jerry), Data Entry Oper., Admn. Comp. Serv. 12 Peele, Box 7208; 118 John Cir., Garner 27529	2459	772-3655
Marshall, Robert E., (Sally), Elec. Tech., Mar., Earth & Atmos Sci. 328 Withers, Box 8208; 4225-2 Avent Ferry Rd., 27606	7911, 2829	851-9780
Marsland, Dr. David B., (Annette), Prof., Chem. Engr. 106 Riddick, Box 7905; 205 Forest Rd., 27605	2325	834-1479
Martin, Annie L., (Mansfield), Clk.-Typ., Work Ctr., Phys. Plant Morris, Box 7219; 1301 Moton Pl., 27610	2991	828-9262
Martin, Carmen T., (June C.), Sec., SVM 4700 Hillsborough St., Box 8401; 203 Brook Rock Ln., Garner, 27529	829-4205	779-7977
Martin, Carole C., (Reinhard), Clk. Typ., Bot. 2214 Gardner, Box 7612; 321 Northfield Dr., 27609	2727	782-8470
Martin, Charles A., (Marie), Dir., Thompson Thea., Univ. Stu. Ctr. Thompson Thea., Box 7305; 220 Ellwood Dr., 27609	2405	782-4588
Martin, Dr. Clifford K., (Marjorie), Asst. Prof., Soil Sci. 1210A Williams, Box 7619; 412 Dixie Tr., 27607	2190	834-3917
Martin, David H., (Betty), Assoc. Prof. Emer., Physics 6 Bureau of Mines Bldg., Box 8202; 820 Merrie Rd., 27606	2505	851-5237
Martin, Dr. Donald C., (Doris), Prof., Comp. Sci. 121 Daniels, Box 8206; 820 Carlisle St., 27610	7944	834-4438
Martin, Fonda R., (Charles), Anes. Tech., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; Rt. 10, Box 275-1A, 27603	829-4200	772-8101

Name, Title, Department and Address	Office Phone	Resid. Phone
Martin, G. Edward, (Gail G.), Crop Sci. Spec., N.C. Crop Impr. Assn.	2851	872-7124
3709 Hillsborough St., Box 8604; 3409 Apache Dr., 27609		
Martin, Dr. Grady A., (Geneva), Ext. Prof. Emer., Poul. Sci. Ext.	2621	833-3940
202 Scott, Box 7608; 2602 Clark Ave., 27607		
Martin, James A., Res. Tech., Anat., Physiol. Sci. & Radiol., SVM	829-4200	469-3930
4700 Hillsborough St., Box 8401; 400F Bass Ct., Cary 27511		
Martin, Dr. LeRoy B., Jr., (Charlotte), Prof., Math.	3350	787-3610
234 Harrelson, Box 8205; 5015 Glenwood Ave., 27612		
Martin, Nancy B., (E. C.), Admn. Sec., Text.	3231	787-7470
106 Nelson, Box 8301; 701 Manchester Dr., 27609		
Martin, Ray A., Asst. Basketball Coach, Athl.	2104	782-4906
Case Athl. Ctr., Box 8501; 2405 Still Forest Pl., 27607		
Martin, Dr. Robert H., Jr., (Elaine), Prof., Math.	3304	782-4670
230 Harrelson, Box 8205; 405 N. Glen Dr., 27609		
Martin, Rose H., (Doug), Wordprocessor, Soc. & Anth.	2702	787-8780
339 1911 Bldg. Box 8107; 3313 Mesa Ct., 27607		
Martin, William R., Jr., (Betsy), Adj. Asst. Prof., Text. Chem.	755-2191	
AATCC Tech. Ctr., Res. Tri. Pk., 27709; 224 Briarcliff Ln., Cary 27511		
Martino, Judith A., Volleyball Coach, Athl.	3826	544-7061
2-C Case Athl. Ctr., Box 8501; 134 Montclair Cir., Durham 27713		
Martorella, Dr. Peter H., (Mary), Head, Curr. & Inst.	3221	
402-S Poe, Box 7801; 110 Lochview Dr., Cary, 27511		
Masnari, Dr. Nino A., (Judith), Prof. & Head, Elec. & Comp. Engr.	3001	876-6227
232 Daniels, Box 7911; 7017 Rainwater Rd., 27609		
Mason, Brenda F., Clk.-Typ., Bio. & Agri'l. Engr.	3101	876-2413
189 Weaver, Box 7625; 4917-E Coolridge Ct., 27604		
Mason, Cindy K., (John), Clk.-Recept., Health Serv.	2563	851-1392
Clark Inf., Box 7304; 1319 Trinity Rd., 27607		
Mason, Dr. David D., (Louise), Prof. Emer., Stat.	2584	787-4324
509 Cox, Box 8203; 4212 Arbutus Dr., 27612		
Mason, Dr. Sarah J., (Luke Cathell), Res. Asst., Micro., Path. & Parasit., SVM	829-4200	846-7050
4700 Hillsborough St., Box 8401; 7105 Mill Ridge Rd., 27612		
Mason, Tony A., (Delores O.), Instru. Mkr., Engr. Res. Serv. Div.	2834	552-5311
1136 Burlington, Box 7903; Rt. 1, Fuquay 27526		
Massel, Mara, Res. Tech., Bot.	3496	832-3689
4207 Gardner, Box 7612; 1103 W. Cabarrus St., 27603		
Massenburg, Loretta K., Rec. Clk., Reg. & Rec.	2572	851-6808
100 Harris, Box 7313; 149-D Jones Franklin Rd., 27606		
Massenburg, Rosa M., (Thomas), Hskp. Supv., Phys. Plant	3323	553-4452
Park Shops, Box 7219; 2141 Government Loop Rd., Clayton, 27520		
Massey, Frances W., (George), Asst. Prof., Text. Mgmt. & Tech.	3469	876-2226
B-51 Nelson, Box 8301; 1301 Fairfax Dr., 27609		
Massey, Shirley B., (Elton), Data Entry Supv., Comp. Ctr.	2517	779-6010
Hillsborough Bldg., Box 7109; 107 Bluegrass Rd., Garner 27529		
Mastro, Dr. Joseph P., (Susie), Co-Dir. Hum. Ext., & Assoc. Prof., Pol. Sci. & Pub. Admin.	3451, 2481	847-8947
M-4 Link Bldg., 205 Link Bldg., Box 8101, 8102		
Mathews, Martha P., (Kenneth), Lect., Speech-Comm.	2450	
215 Winston, Box 8104		
Mathis, Debra A., Baker Asst., Univ. Dining	2021	828-4007
B-113 Univ. Stu. Ctr., Box 7307; E-24 Washington Terr., 27610		
Mathis, Dr. James N., Res. Assoc., Microb., Crop Sci.	3905	851-6732
3127 Ligon St., Box 7631; 513 Brent Rd., 27606		
Mathis, Vickie H., Data Entry Oper., Dairy Rec. Proc. Ctr.	2075	469-3464
Leazar, Box 7623; 1234-B Hamilton Ct., Cary 27511		
Matrone, Ann G., (Kenneth), Res. Tech., Bot.	3600	851-5881
2203 Gardner, Box 7612; 811 Brent Rd., 27606		
Matthews, Bonnie E., (Tom), Sec., McKimmon Ctr.	2277	851-6200
225 McKimmon, Box 7401; 1704 Westhaven Dr., 27607		
Matthews, Deborah S., Pers. Analyst, Univ. Temp. Serv., Human Resou.	7175	
Admn. Serv. Ctr., Box 7210; 5730 Bare Back Court, 27607		
Matthews, Edison A., Laun. Tum./Dry Oper., Laun.	2122	772-5598
Laundry, Box 7218; 310 Old Garner Rd., Garner		

Name, Title, Department and Address	Office Phone	Resid. Phone
Matthews, Dr. Hazel B., Jr., (Betty), Adj. Prof., Ent. NIEHS, Res. Triangle Park; 5301 Pelham Rd., Durham	541-3252	544-3924
Matthews, Jim, (Mary), Lect., Phys. Educ. 2009 Carmichael, Box 8111; 4313 C. Bayliner Dr., 27604	2487, 2488	878-5933
Matthews, Dr. Joseph C., Jr., Asst. Prof. Emer., Ec. & Bus. 4706 Western Blvd., 27606		851-4851
Matthews, Mickey L., (Jan), Litho., Univ. Graphics Sullivan Dr., Box 7226; E-515, Rt. 2, 27610	2131	772-7086
Matthews, Dr. Neely F. J., (Betty), Prof., Elec. & Comp. Engr. 420 Daniels, Box 7911; 2429 Coley Forest Pl., 27612	2336	782-5156
Matthews, Vellie F., Jr., (Shelby), Photo., Agri'l. Comm. G-1 Ricks Annex, Box 7603; 623 Watauga St., 27604	2861	
Matyac, Dr. Carl A., (Helen Gordon), Res. Assoc., Plant Path. 3418 Gardner, Box 5397; 1614 Ambleside Dr., 27605	2751	832-4503
Matzen, Dr. Vernon C., (Connie), Assoc. Prof., Civil Engr. 418 Mann, Box 7908; 3401 Wembley Ct., 27607	2331	787-6425
Matzinger, Dr. Dale F., (Camilla), Prof. & Acting Head, Gen. 2633 Gardner, Box 7614; 3413 Doyle Rd., 27607	2285	787-4720
Mauney, Dr. Jon., (Kathy), Asst. Prof., Comp. Sci. 131-A Daniels, Box 8206; 409 Brooks Ave., 27607	7889	834-4077
Mauney, Katherine R., Analyst Programmer, Admn. Comp. Serv. 1212 Blue Ridge Rd., Box 7227	3640	
Maxwell, Dr. E. Stuart, (Karen), Asst. Prof., Biochem. 332 Polk, Box 7622; 615 Ellynn Dr., Cary 27511	2581	469-1520
Maxwell, Margaret E., Clk.-Typ., Chem. Engr. 113 Riddick, Box 7905; 3810 Wingate Dr., 27609	2324	876-7097
May, Julia G., Univ. Dev. Off., Development 1-F Holladay, Box 7502; 1621 Sutton Dr., 27605	7827	839-0557
Mayer, Kenneth C., (Hazel), Supt. Trng. & Dev., Phys. Plant 119B Morris, Box 7219; 917 Plateau Ln., 27609	2181	847-1622
Mayes, Ethan A., Agri'l Res. Asst., Univ. Res. Unit 10 Rt. 1 Box 198-B, Bahama, Box 7601	471-6872	
Maynard, Annette C., (Tommy), Clk.-Steno., Civil Engr. 208 Mann, Box 7908; 915 Laura Duncan Rd., Apex 27502	2331	362-7698
Maynard, Gaynell B., (Thomas), Acct. Tech., Found. Acct. & Invest. B Holladay, Box 7207; 3512 Planet Dr., 27604	2110	872-2917
Mazzara, Christopher S., (Susan), Sec., Monographic Cat. 1121 Library, Box 7111; 2402 Clark Ave. #3, 27607	2603	755-1778
McAllister, Dr. David F., Prof., Comp. Sci. 122-B Daniels, Box 8206; 813 Roanoke Dr., Cary 27511	7971	469-5514
McBrayer, Charles B., Mgr., Fin. Off. Sys. Staff 1212 Blue Ridge Rd., Box 7227; 708 Silverleaf Pl., 27609	3640	787-4255
McBride, Timothy P., Lect., Engl. 116 Tompkins, Box 8105; 1544 Varsity Dr., 27606	3854	834-8053
McCabe, Eugene F., (Sally), Res. Tech., Plant Path. 2523 Gardner, Box 7616; 111 Twain Dr., Rt. 2, Garner 27529	2287	772-7016
McCall, Brian, Asst. Grnhse. Mgr., Hort. Sci. 104 Hort. Sci. Grnhse., Box 7609; 6109 Buffaloe Rd., 27604	2685	876-2631
McCall, Janet S., Telecomm. Off., Public Safety Field House, Box 7220	3206	
McCallum, Glen, Food Serv. Asst., Univ. Dining Dining Hall, Box 7307; Rt. 1, Box 139, Holly Springs 27540	3963	552-9335
McCants, Dr. Charles B., (Stan), Dir. Mgmt Entity, CRSP, Soil Sci. 4238 Williams, Box 7113; 201 Merwin Rd., 27606	3922	851-5067
McCants, Robert L., Orderly, Health Serv. Clark Inf., Box 7304; 3810½ Sherman Ave., 27606	2562	851-5110
McCarthy, Larry A., (Nancy), Bind. Equip. Oper., Univ. Graphics Sullivan Dr., Box 7226; 3048 Lewis Farm Rd., 27607	2131	781-9185
McCarty, Michael M., (Cheryl), Elec. Apprentice, Phys. Plant Armory Shop, Box 7219; 4909 Dane Dr., Apt. 60, 27606	3080	859-1026
McClain, Dr. Jackson M., (Margaret), Assoc. Prof., Pol. Sci. & Pub. Admn. 207 Link Bldg., Box 8102; 808 Pamlico Dr., Cary 27511	2481	467-6758

Name, Title, Department and Address	Office Phone	Resid. Phone
McClain, Wilma F., Clk.-Typ., Bio. & Agri'l. Engr.	2675	
203 Weaver, Box 7625; 230 New Rand Rd., Garner 27529		
McClamb, Etta W., Photo., Visual Aids, Agri'l. Comm.	2861	755-0504
12 Ricks, Box 7603; 1008 Belmont Dr., 27610		
McClamb, Walter, (Alice), Hskp. Supv., Phys. Plant	3323	772-6900
Park Shops, Box 7219; 5905 Colonial Dr., 27603		
McClelland, Dr. Jacquelyn W., (Bill), Vis. Asst. Prof., Ani. Sci.	2773	467-0586
310-B Polk, Box 7621; 816 Brookgreen Dr., Cary, 27511		
McClintock, Dr. David W., Vis. Assoc. Prof., Pol. Sci. & Pub. Admin.	2481	834-1561
227 Link Bldg., Box 8102; 504 N. East St., 27604		
McClure, Dr. W. Fred, (Judy), Prof., Bio. & Agri'l. Engr.	3101	782-8351
190 Weaver Box 7625; 3401 Malibu Dr., 27607		
McCollum, Marilyn S., (Gary), Lect., Math.	7884	467-7285
206 Harrelson, Box 8205; 209 Farmington Woods Dr., Cary 27511		
McCollum, Dr. Robert E., (Doris), Assoc. Prof., Soil Sci.	2645	851-0310
4235 Williams, Box 7619; 4931 Liles Rd., 27606		
McConathy, Sharon K., (Sam), Cash., SSS	2161	839-1335
SSS, Box 7224; 705 Holden St., 27604		
McCormick, Dr. Gwendolyn Y., Assoc. Dir., Ani. Resou., Asst. Prof., Div. Ani. Resou., SVM	829-4238	
4700 Hillsborough St., Box 8401; 305 Indigo Dr., Cary 27511		
McCoy, Betsy F., Sec., Math. & Sci. Educ.	2238	
326 Poe, Box 7801; 1220 S. Spring Garden Cir., 27603		
McCoy, Carolyn D., (Ronald), Sec., Prog. of Acad. Advance for Stud. Athl. ...	2464	847-3202
124 Reynolds Coliseum, Stu. Athl., Box 7104; 7813 Brandyapple Dr., 27609		
McCoy, Novella A., Trng. Off., Phys. Plant	2180	833-3852
200 Morris, Box 7219		
McCraw, Dr. Roger L., (Phyllis), Asst. Prof., Ani Sci.	2761	544-1174
109 Polk, Box 7621; 5408 Lacy Rd., Durham, 27713		
McCray, Betty, Cook, Univ. Dining.	2021	
Univ. Student Ctr., Box 7307		
McCrimmon, Karen E., Acct. Clk., SVM	829-4200	
4700 Hillsborough St., Box 8401; 2800-B Garner Rd., 27610		
McCullers, Ida M., Laun. Wkr., Laun.	2122	779-6733
Laundry, Box 7218; 3315 Barwell Rd., 27610		
McCullers, James L., (Ida Mae), Bind. Supv., Univ. Graphics	2131	779-6733
Sullivan Dr., Box 7226; 3315 Barwell Rd., 27610		
McCullers, Maechrister B., Clk.-Typ., Agri'l. Admin.	2666	821-5439
104 Patterson, Box 7601; 3216 Holly Springs Rd., 27603		
McCullough, Yvonne A., Sec., Development	3700	847-6533
7 Holladay, Box 7502; 6420 English Oaks, 27609		
McCutcheon, Dr. Linda F., Assoc. State Ldr., Home Ec., Agri'l. Ext. Serv.	2782	876-5151
103 Ricks, Box 7605; 913 Langford Pl., 27609		
McDaniel, Freddie H., Maint. Mech., Phys. Plant	3080	772-8701
Armory, Box 7219; Rt. 3, Box 471W, 27603		
McDaniel, Patricia A., Libr. Clk., Serials	7021	832-4356
Library, Box 7111; 3323 Briarcliff Rd., 27610		
McDaniel, Paul A., Instr., Soil Sci.	2643	834-2456
2314 Williams, Box 7619; 3103½ Clark Ave., 27607		
McDermid, Dr. Ann A., Asst. Prof., Ec. & Bus.	3041	782-7842
318-B Hillsborough Bldg., Box 8110; 1319 Ridge Rd., 27607		
McDonald, Lee R., Jr., (Lany), Assoc. Dir., Univ. Stu. Ctr.	2558	851-6362
3102 Univ. Stu. Ctr., Box 7306; 3711 Swift Dr., 27606		
McDonald, Norma P., (O. C.), Housing Admin., Housing & Resid. Life	2449	851-0478
201-A Harris, Box 7315; 3712 Lail Ct., 27606		
McDonald, Dr. Patrick H., (Virginia), Prof., Civil Engr.	2331	851-6478
200 Mann, Box 7908; 3120 Tanager St., 27606		
McDougal, Edith F., (James), Sec., Counseling Ctr.	2423	
200 Harris, Box 7312; 1201 Bentley Ln., 27610		
McDuffie, Elizabeth V., (Michael), Asst. Dir., Fin. Aid	2421	828-3823
213 Peele, Box 7302; 2907 O'Berry St., 27607		
McElroy, Connie M., Spec., Con. Educ.	2261	469-9355
147-A McKimmon Ctr., Box 7401; 1118 Nottingham Cir., Cary 27511		

Name, Title, Department and Address	Office Phone	Resid. Phone
McElroy, Dr. Michael B., Assoc. Prof., Grad Administrator 214 Patterson, Box 8109; 2711 Everett Ave., 27607	2607	834-7275
McEntee, Dr. Margaret C., Intern, Sm. Ani., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401	829-4200	
McEntee, Dr. Michael F., Resid., Path., SVM 4700 Hillsborough St., Box 8401	829-4200	
McFayden, Virginia J., Conference Coord., Acid Depos. Prog., For. 1509 Varsity Dr., Box 7632; 3120 Tanager St., 27606	3520	851-6478
McFeeters, Dorothy (Jo), Libr. Asst., Acqs., Libr. 3110 Library, Box 7111; 3305 Cobblestone Ct., 27607	3188	782-6553
McFeeters, Dr. Roger F., (Dorothy), Prof., USDA., Food Sci. 322-D Schaub, Box 7624; 3305 Cobblestone Ct., 27607	2979	782-6553
McGahan, Dr. M. Christine, (Lloyd Fleisher), Vis. Asst. Prof., Anat., Physiol. Sci. & Radiol.-SVM 4700 Hillsborough St., Box 8401; 314 Indigo Dr., Cary 27511	829-4200	481-0792
McGaughey, Geoffrey S., Lab. Mgr., Mat. Engr. 2 Riddick Annex, Box 7907; 4315-3 Avent Ferry Rd., 27606	2347	851-5767
McGeachy, John A., Docu. Librn., Docu., Libr. 2110E Library, Box 7111; 4327-1 Avent Ferry Rd., 27606	3280	859-0612
McGee, Beth A., (Ray), Asst. Dir., Univ. Rel., Univ. Rel. 10 Holladay, Box 7505; 210 Old Drug Store Rd., Garner 27529	2850	772-9586
McGee, Floyd G., Maint. Mech., Phys. Plant 4700 Hillsborough St., Box 8401; 101-A Skyland Dr., Smithfield, 27577	829-4217	934-2451
McGeehan, Cheryl A., Acct. Tech., Spec. Acct. Serv. 213 Admn. Serv. Ctr., Box 7205; 220 Dartmoor Ln., 27614	3953	847-6574
McGill, Velma J., Hskp. Asst., Phys. Plant Park Shops, Box 7219	3323	
McGlamery, Beth, Clk.-Typ., Food Sci. 116 Schaub, Box 7624; Rt. 1, Lot 11, Valley Woods, 27545	2959	266-6535
McGlamery, Edith B., Housing & Home Furnishings Spec., Home Ec., Agri'l Ext. Rt. 1, Box 24, Mt. Pleasant, 28124	704-788-1222	
McGraw, Dr. James R., (Jinx), Assoc. Prof., Ext. For. Resou. 3028-C Biltmore, Box 8003; 1604 Tarbert Dr., Cary 27511	3386	467-1686
McGregor, Dr. Ralph, (Maureen), Cone Mills Prof., Text. Chem. 103 Clark, Box 8302; 8276 Hillside Dr., 27612	2551	782-4834
McGuire, Joseph, (Ruth), Engr. Res. Tech., Food Sci. 119 Schaub, Box 7624; Rt. 25, Box 254-A, Old Millburnie Rd. 27604	2950	266-6723
McIlwee, John C., Costumer, Univ. Stu. Ctr., Thompson Thea., Box 7305	2405	
McIntyre, Martin L., (Joyce), Agri'l Res. Tech., Hort. Sci. 106 Hort. Grnhse., Box 7609; 5039 Kaplan Dr., 27606	2685	851-4540
McKeand, Dr. Steven E., (Louise), Asst. Prof., For. 1019 Biltmore, Box 8002; 1414 Ashburton, 27606	3168	851-7818
McKee, Dr. A. James, Asst. Prof., Ec. & Bus. 207 Patterson, Box 8109; 1135 Nottingham Circle, Cary 27511	3951	469-1276
McKeithan, James F., Comp. Sales Spec., SSS SSS, Box 7224; 611 Elm St., 27604	2161	834-8832
McKenzie, Cynthia G., Acct. Clk., Acct. Pay. 213 Admn. Serv. Ctr., Box 7204; 1610 Glenwood Ave., Apt. K, 27608	3367	829-8058
McKenzie, R. Ann, Res. Tech., Biochem. 339 Polk, Box 7622; 461 Rose Ln., 27610	2581	828-2888
McKenzie, Dr. Wendell H., (Georgie), Prof., Gen. 2544 Gardner, Box 7614; 3423 Redbud Ln., 27607	2287	787-9084
McKinley, Raeford F., Jr., (Barbara), Agri'l. Res. Asst., Zool. Small Ani. Facility, Ligon St., Box 7617; 1331 Baez St., 27608	3218	755-0293
McKinney, Carla T., (Michael), Clk.-Typ., Ani. Sci. 203 Polk, Box 7621; 1121 Tanglewood Dr., Cary 27511	2566	469-0196
McKinney, Claude E., (Mimi), Dean, Design 200-A Brooks, Box 7701; 2109 Coley Forest Pl., 27607	2201	782-7597
McKinney, Jeana D., Asst. Coord., Int'l. Prog. 209 Daniels, Box 7112; 504 N. East St., 27604	3201	834-1561

Name, Title, Department and Address	Office Phone	Resid. Phone
McKinney, Dr. Thearon T., (Vanette), Ext. 4-H Spec., Assoc. Prof., Ext. 4-H & Youth Dev.	3242	851-1893
207 Ricks, Box 7606; 5016 Huntingdon Dr., 27606		
McKinnon, W. Huntley, (Karen), Conslt. Arch., Campus Plan. & Const.	2121	732-9448
219 Oberlin Rd., Box 7216; 109 N. Wake St., Hillsborough 27278		
McKnight, Katherine P., Hskp. Supv., Phys. Plant	3323	
Park Shops, Box 7219		
McKoy, Belinda A., Plumber, Phys. Plant	3080	832-1301
Armory Shop, Box 7219; 430-A So. Swain St., 27601		
McLamb, Alice F., (R. D.), Sec., Zool.	2741	467-1226
2109 Gardner, Box 7617; 211 E. Maynard Rd., Cary 27511		
McLamb, Cindy L., (Ronnie), Clk.-Steno., Hort. Sci.	3537	469-3207
123 Kilgore, Box 7609; Rt. 1, Box 150AA, Morrisville 27560		
McLamb, D. Wayne, (Debbie), Res. Tech., Ani. Sci.	2674	779-2134
3720 Lake Wheeler Rd., Box 7621; 5605 Dearborn Dr., Apex, 27502		
McLamb, Ralph D., (Faye), Mgr., Ani. Resou., SVM	829-4201	467-1226
4700 Hillsborough St., Box 8401; 211 E. Maynard Rd., Cary 27511		
McLaughlin, Foil W., (Pauline C.), Ext. Prof. & Dir., N.C. Crop Impr. Assn.	2851	787-6991
3709 Hillsborough St., Box 8604; 804 Runnymede Rd., 27607		
McLaughlin, Rachel, Sec., Hort Sci.	3131	782-1378
120 Kilgore, Box 7609; Apt. 509, 3939 Glenwood Ave., 27612		
McLean, Carrie F., (Tobias), Libr. Asst., Text. Libr.	3043	266-3277
112 Nelson, Box 8301; Rt. 2, Box 179, Knightdale, 27545		
McLean, Dr. Clifton C., (Laura), Mgr., Vet. Equine Res. Ctr.	692-8773	692-3424
P. O. Drawer 211; 2135 Midland Rd., Southern Pines 28387		
McLean, Edward C., (Mai), Asst. Basketball Coach, Athl.	2104	848-6619
Case Athl. Ctr., Box 8501; 6800 Woodmere Dr., 27612		
McLean, Edward C., (Elizabeth), Text. Res. Tech., Text. Engr. & Sci.	3074	469-9766
323 Nelson, Box 8301; 1215 Gatehouse Dr., Cary 27511		
McLean, Hoyal A., Food Serv. Asst., Univ. Dining	3963	832-9062
Dining Hall, Box 7307; 301 Idlewood, Apt. 13., 27601		
McLean, Patricia N., Admn. Asst., Univ. Rel.	2850	
12 Holladay, Box 7505		
McLean, Peggy, (Lonnie), Hskp. Asst., Phys. Plant	3323	779-0252
Park Shops, Box 7219; Rt. 10, Box 534-Y, 27603		
McLean, Rosa L., Bkpr., Design	2202	832-9424
200 Brooks, Box 7701; 1809 Boaz Rd., 27610		
McLeod, Lawrence D., Jr., Food Serv. Asst., Univ. Dining	3963	
Dining Hall, Box 7307		
McLeod, Mavorine F., (Linwood), Acct. Tech., SVM	829-4200	553-7477
4700 Hillsborough St., Box 8401; 226 Hardee St., Clayton 27520		
McLeod, Penelope H., (James F.), Crime Prevention Off., Public Safety	2156	
Field House, Box 7220		
McLester, Michael L., (Marge Davenport), Elec. Tech., Bio. & Agri'l. Engr.	3101	821-4598
194 Weaver, Box 7625; 709 New Rd., 27608		
McLymore, Robert L., (Winifred), Ext. Safety Spec., Bio. & Agri'l. Engr.	2675	469-1660
201-A Weaver, Box 7625; 405 Applecross Dr., Cary 27511		
McMillan, Lelia, Gen. Utility Wkr., Motor Pool	2179	
Sullivan Dr., Box 7219; 801-F Vardaman St., 27610		
McMillan, Lena P., (Clarence), Clk.-Typ., Book Div.	3117	
SSS, Box 7224; 806 S. State St., 27601		
McMillian, Thomas E., Hskp. Asst., Phys. Plant	3323	832-6606
Park Shops, Box 7219; 501 Cutler St., #3A, 27603		
McMullen, Michael L., Sys. Prog., Comp. Ctr.	2517	
B17-J Hillsborough Bldg., Box 7109		
McMurry, Dr. Linda O., (Richard), Assoc. Prof., Hist.	2485	787-7355
106 Harrelson, Box 8108; 3212 Caldwell Dr., 27607		
McNally, Mae P., (Johnny), Clk.-Recpt., Univ. Dining	2021	266-1094
B116 Univ. Stu. Ctr., Box 7307; Rt. 5, Box 195-B, 27604		
McNamara, Father Joe, O.M.I., Catholic Chaplain, Coop. Campus Min.	2414	832-6030
1200 Univ. Stu. Ctr., Box 7306; 15 N. McDowell St., 27603		

Name, Title, Department and Address	Office Phone	Resid. Phone
McNaughton, Toni G., (Jim), Asst. Dir., Admin., Housing & Resid. Life 206 Harris, Box 7315; 101-D Stephanie Dr., Cary 27511	7482	467-0495
McNeil, Dr. John J., (Mary Ann), Assoc. Prof., Ani. Sci. 310-B Polk, Box 7621; 305 Forest Rd., 27605	2773	833-8589
McNeill, Guthrie, (Annie), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 2520 Garner Rd., Lot 186, 27610	3323	839-0408
McNeill, S. J., Clk.-Recept., Payr. & Ben. Admn. Serv. Ctr., Box 7215; 228 Camel St., Lot 22, Willow Springs 27592	2151	
McPeters, Dr. Arnold L., (Ginette), Res. Asst., Chem. Engr. 116 Riddick, Box 7905; 6829 Perkins Dr., 27612	2460	846-1474
McPherson, Dr. Charles W., (Lillian), Dir., Lab. Ani. Resou., Comp. Ani. & Sp. Species Med.-SVM 4700 Hillsborough St., Box 8401; 200 Summerwinds Dr., 27606	829-4280	851-7446
McPherson, Dr. Edwin M., (Ruth), Vis. Assoc. Prof., Text. Mgmt. & Tech. ... 134B Nelson; 108 Oak Hill Loop, Cary 27511	3890	467-1279
McQueen, Timothy C., (Julie), Sys. Analyst., Admn. Comp. Serv. B21 Hillsborough Bldg., Box 7209; 1301 Castalia Dr., Cary 27511	2794	467-9609
McRae, Dr. D. Scott, Assoc. Prof., Mech. & Aero Engr. 4205 Broughton, Box 7910; 7353 Sandy Creek Dr., 27609	2365	847-6998
McRae, Linda M., Clk. Steno, Ani. Sci. 104 Polk, Box 7621; 7913 Old Deer Tr., 27609	2771	848-3637
McVay, Dr. Francis E., Prof. Emer., Stat. 3104 Churchill Rd., 27607		787-5632
McVay, Dr. Julie G., Assoc. Prof., Counselor Educ. 520 Poe, Box 7801; 3104 Churchill Rd., 27607	2244	787-5632
Means, Sarah A., Clk.-Typ., Trans. Admn. Serv. Ctr., Box 7221; Rt. 4, Box 250, 27606	2120	
Meares, Dr. Gloria J., (Robert Brandon), Clinical Psychologist, Counseling Ctr. 200 Harris, Box 7312; 1209 Oakland Ave., Durham 27705	2423	286-9655
Medlin, Bennie R., Jr., (Cindy), Dupl. Oper., Ec. & Bus. 16 Patterson, Box 8109; 9778 Kennebee Rd., Willow Springs, 27592	2258	639-6653
Medlin, Larry W., (Frankie), Res. Unit Mgr., Poul. Sci. Univ. Res. Farm 2, Box 7608; 3545 N.C. 42 West, Clayton 27520	3446	553-6801
Medlin, Tex C., (Mary), Mech., Phys. Plant 18 Riddick Stad., Box 7219; 3131 Medlin Rd., Clayton, 27520	3749	553-3855
Medlyn, Telisa G., Bio. Lab. Tech., Micro./USDA-ARS 4627 Gardner; 1112 Clarendon, Durham 27705	3770	286-3365
Meekins, Olivia, Hskp. Asst., Phys. Plant Park Shops, Box 7219; 1334 Holman St., 27601	3323	828-6865
Meeks, Harold G., Courier, Comp. Ctr. Hillsborough Bldg., Box 7109; 2401-1 Sonora St., 27606	2517	834-7056
Mehrotra, Dr. Ravi, (Yasmin), Asst. Prof., Elec. & Comp. Engr. 223 Daniels, Box 7911; 2800-303 Avent Ferry Rd., 27606	2336	859-1426
Melbourne, Ronald J., (Billie Jo), Data Administrator, Admn. Comp. Serv. ... B21 Hillsborough Bldg., Box 7209; 1701 Laughridge Dr., Cary 27511	2794	469-9565
Meldau, Dr. Elizabeth U., Dist. Ext. Chm., Agri'l. Ext. Serv. 307 Ricks, Box 7604; 1302 Chaney Rd., 27606	2789	851-2295
Melton, Brent, (Lisa), Branch Mgr., State Employees' Credit Union 2802 Hillsborough St., Box 8609	2686	
Melton, Margaret J., (Thoyd), Libr. Clk., Mono. Cat. 1121 Library, Box 7111; 1100 Chatham Ln., 27610	2603	833-5750
Melton, Dr. Thoyd, (Margaret), Assoc. Prof., Microb. 4609 Gardner, Box 7615; 1100 Chatham Ln., 27610	7136	833-5750
Mendes, Chris, (George), Vet. Aff. Counselor, Reg. & Rec. 100 Harris, Box 7313; 102 Glenn Bryan Ct., Garner 27529	2576	772-2392
Menetrez, Dr. Mary L., (Marc), Res. Assoc., Plant Path. Box 7616; Tob. Res. Lab., Oxford, 27565; 2306 Rodeo Rd., Durham, 27704	693-5151	688-9226
Mengel, Dennis L., (Mari), Res. Asst., For. Resou. 2023 Biltmore, Box 8002; 2426 Stevens Rd., 27610	3674	783-6491
Menius, Dr. Arthur C., Jr., (Lucy), Dean Emer., Phys. & Math. Sci. 541 Hertford St., 27609		787-3520
Mercer, Linda, Res. Tech., Crop Sci. 840 Method, Unit 3, Box 7629; 100 Horne St., Apt. 1, 27607	3281	755-0634

Name, Title, Department and Address	Office Phone	Resid. Phone
Merrill, Donna F., Bus. Off., Dairy Rec. Proc. Ctr.	2632	544-4152
Leazar, Box 7623; 5834 Shamrock Rd., Durham 27713		
Merrill, Shiela G., (Tom), Clk.-Typ., Phys. Plant	2181	
103 Morris, Box 7219		
Mershon, Dr. Donald H., (Loretta), Assoc. Prof., Psy.	2252	833-6743
714-B Poe, Box 7801; 115 W. Park Dr., 27605		
Mershon, Loretta K., (Donald), Asst. Head, Serials, Libr.	3136	833-6743
G-114 Library, Box 7111; 115 W. Park Dr., 27605		
Messer, Faye M., (Kenneth), Data Entry Oper., Dairy Rec. Proc. Ctr.	2075	639-4819
Leazar, Box 7623; 7897 James Austin Rd., Willow Springs 27592		
Messere, Dr. Carl J., (Patricia), Prof., Ec. & Bus.	3273	851-8095
201-F Patterson, Box 8109; 106 Sylvan Grove Dr., Cary 27511		
Messick, Patricia L., (J. Kent), Res. Tech., Ent.	3391	467-5297
3709 Hillsborough St., Box 8604; 402 Willowbrook Dr., Cary 27511		
Metcalf, Dr. Michael R., (Mary), Asst. Prof. Radiol., Anat., Physiol. Sci. & Radiol., SVM	829-4200	
4700 Hillsborough St., Box 8401; 713 Merrie Rd., 27606		
Mettler, Dr. Lawrence E., (Mary), Prof. Emer., Gen.	2292	851-1978
Gardner, Box 7614; 1149 Apex-Macedonia Rd., Cary, 27511		
Mettus, Anne-Marie L., (Rick), Res. Tech., Ani. Sci.	2773	781-2363
309 Polk, Box 7621; 4112E Woodlake Pl., 27607		
Metzger, Dr. Robert S., (Eva), Assoc. Prof. Phil., Phil. & Rel.	3214	967-3411
116 Winston, Box 8103; 1404 Brigham Rd., Chapel Hill 27514		
Meuten, Dr. Donald J., (Pamela Kuder), Assoc. Prof., Micro., Path., & Parasit., SVM	829-4296	542-3766
4700 Hillsborough St., Box 8401; Rt. 5, Box 347, Pittsboro 27312		
Mew, Binks, (Ted), Sec., Speech-Comm.	2450	832-9445
214 Winston, Box 8104; 3715 Trenton Rd., 27607		
Meyer, Dr. Carl D., Jr., (Bethany B.), Prof., Math.	2384	851-2600
241 Harrelson, Box 8205; 704 Merwin Rd., 27606		
Meyer, Dr. John R., (Christine), Assoc. Prof., Ent.	3140, 3183	832-5413
Grinnells, Box 7626; 2718 Everett Ave., 27607		
Meyer, Dr. Peter, (Linda Shoulberg), Assoc. Dir., Urban Aff.	3211	847-2996
289 McKimmon, Box 7401; 6704 Mill Bridge Ct., 27609		
Meyer, Dr. Robert E., (Sharon), Asst. Prof., Anat., Physiol. Sci. & Radiol., SVM	829-4200	467-3055
4700 Hillsborough St., Box 8401; 104 High Pine Ct., Cary 27511		
Meyers, Julia R., (Walter), Lect., Engl.	3854	467-6457
106 Tompkins, Box 8105; 403 Carriage Ln., Cary 27511		
Meyers, Dr. Walter E., (Julia), Prof., Engl.	3870	467-6457
233 Tompkins, Box 8105; 403 Carriage Ln., Cary 27511		
Mezynski, Stanley, (Lovina), Glass Technologist, Phys. & Math. Sci.	3562	
101 Daniels; 4320 Waterwheel Dr., 27606		
Mial, Mary, Food Serv. Asst., Univ. Dining	3270	
Erdahl-Cloyd Annex, Box 7307		
Mial, Maurice L., Food Serv. Asst., Univ. Dining	2021	834-7959
Univ. Stu. Ctr., Box 7307; 748 Lunar Dr., 27610		
Mial, Phyllis M., Pers. Asst., SVM	829-4208	
4700 Hillsborough St., Box 8401; 1213 Boyer St., 27610		
Michaels, Dr. Alan S., (Janet), Distinguished Univ. Prof., Chem. Engr.,	2324	
116 Riddick, Box 7905		
Mickens, Rudolph, Floor Maint. Asst., Phys. Plant	3323	833-8561
Park Shops, Box 7219; 2308 May View Rd., 27607		
Mickey, Susan P., (Bill), Clk.-Typ., Housing	2449	772-8234
201 Harris, Box 7315; 2603 Dunhaven Pl.		
Middleton, Joseph Leonard, (Elizabeth), Assoc. Prof. Emer., Phil. & Rel.		704-685-7439
Holiday Hills, Rt. 2, Box 237, Hendersonville 28739		
Middleton, P. Lyn, Asst. Prof., Prod. Design	2205	834-5072
317 Brooks, Box 7701; 130-G Cox Ave., 27605		
Middleton, Woodford R., (Helen D.), Acct., Contr. & Grants	2153	872-1267
Leazar, Lower Level, Box 7214; 5700 Dumfries Dr., 27609		

Name, Title, Department and Address	Office Phone	Resid. Phone
Midgett, Christine A., (Bob), Coord., Univ. Temp. Serv., Human Resou.	7060	469-9691
Admn. Serv. Ctr., Box 7210; 105 Wigan Circle, Cary, 27511		
Midgett, Howard B., Jr., (Sherry), Litho., Univ. Graphics	2131	
Sullivan Dr., Box 7226; 105 Perdue St., Garner 27529		
Milani, Catherine, Vis. Lect., For. Lang.	2475	544-5106
138 1911 Bldg., Box 8106; 4729B E. Cornwallis Rd., Durham 27713		
Miles, Bruce T., Safety Inspector, Public Safety	7915	834-3217
Field House, Box 7220; 630 N. Blount St., Apt. 2, 27604		
Miles, John J., Dairy Plant Mgr., Food Sci.	2760	846-8105
12 Schaub, Box 7624; 279 Newton Rd., 27609		
Miles, Dr. Marion L., Asst. Head, Bus. Aff. & Facil., & Prof., Chem.	2941	787-3352
525 Dabney, Box 8204; 4021 Huckleberry Dr., 27612		
Milholland, Dr. Robert D., (Celeste), Prof., Plant Path.	2751	848-1394
3420 Gardner, Box 7616; 8520 Sleepy Creek Dr., 27612		
Milks, Dreauna C., (Robert), Res. Tech., Plant Path. Mt. Hort. Crops Res. Sta., 2016 Fanning Bridge Rd., Fletcher 28732-9628	704-684-3562	
Rt. 1, Box 240-B, Horseshoe 28742	704-891-8642	
Milks, Frances M., (Robert), Spec. Projects Coord., Univ. Rel.	2850	834-3222
10 Holladay, Box 7505; 805 N. Elm St., 27604		
Miller, Alice R., (Michael Budlong), Dir., Human Resou.	2973	781-3288
Admn. Serv. Ctr., Box 7210; 3004 Glen Burnie Dr., 27607		
Miller, Dr. Carolyn R., (Carl Blackman), Assoc. Prof., Engl.	3854	787-6509
104 Tompkins, Box 8105; 3413 Horton St., 27607		
Miller, Carolyn S., (David Smith), Vis. Lect., Comp. Sci.	2858	781-1395
122 Daniels, Box 8206; 3236 Birnamwood Rd., 27607		
Miller, Chandra K., Food Serv. Asst., Univ. Dining	3270	779-6237
Erdahl-Cloyd Annex, Box 7307; 2708 Verde Dr., 27603		
Miller, Dr. Conrad H., (Sarah), Prof., Hort. Sci.	3167	851-4454
212 Kilgore, Box 7609; 4406 Driftwood Dr., 27606		
Miller, Dale C., Ext. Ani. Husb. Spec., Ani. Sci.	2761	481-2023
109 Polk, Box 7621; 106 Tracy Court, Cary 27511		
Miller, Dr. Dan C., Asst. Prof., Engl.	3870	782-2621
249 Tompkins, Box 8105; 1200 Duplin Rd., 27607		
Miller, Dr. David M., Asst. Prof., Zool.	3830	467-6524
1638 Gardner, Box 7617; 203 Rosebrooks Dr., Cary 27511		
Miller Donna J., Lab. Ani. Tech., Lab. Ani. Resou., SVM	829-4201	859-1534
4700 Hillsborough St., Box 8401; 1100 J Lupine Ct., 27606		
Miller, Eric S., (Sherrill), Asst. Prof., Microb.	7922	859-3170
4526 Gardner, Box 7615; 3151 G Walnut Creek Pkwy., 27606		
Miller, G. H., Jr., (Vivian), Whse. Supt., N.C. Found. Seed Prod.	2821, 833-6101	851-4966
4025 Beryl Rd., Box 8603; 1108 Lorimer Rd., 27606		
Miller, Garry D., (Linda), Assoc. Dir., Nuc. Reac. Prog., Nuc. Engr.	2322	851-9083
2119 Burlington, Box 7909; 724-D Grove Ave., 27606		
Miller, Gary R., (Barbara), Proj. Supv., Urb. Aff.	2578	362-0308
260 McKimmon, Box 7401; 302 Pinewood Dr., Apex, 27502		
Miller, Glendora, Acct. Clk., Univ. Dining	7012	779-6237
3805 Beryl Rd., Box 7307; 2708-E Verde Dr., 27603		
Miller, Gregory E., (Katherine), Art.-Illus., Agri'l Comm.	2861	872-7911
Ricks, Box 7603; 6908 Ives Cir., 27604		
Miller, Dr. Grover C., (Judy), Prof., Zool.	2588	481-3447
1627 Gardner, Box 7617; 102 Talon Dr., Cary, 27511		
Miller, Dr. Howard G., (Julia), Prof. Emer., Psy.	2251	787-6039
640-B Poe, Box 7801; 3411 Noel Ct., 27607		
Miller, Dr. John M., Prof., Zool.	3495, 2589	467-3554
4108 Gardner, Box 7617; 1107 Imperial Rd., Cary 27511		
Miller, Dr. Joseph E., (Sandra), Assoc. Prof., (USDA), Crop Sci.	3576	481-1463
1509 Varsity Dr., Box 7632; 107 Cougar Ct., Cary 27511		
Miller, Judy C., (Grover), Admn. Asst., SVM	829-4262	
4700 Hillsborough St., Box 8401; 102 Talon Dr., Cary, 27511		
Miller, Kokeita, Asst. Area Dir., Res. Life, Stu. Aff.	2406	
Box 7315; 27695-7315		

Name, Title, Department and Address	Office Phone	Resid. Phone
Miller, Latham L., (Frankie), Assoc. Prof. Emer., Rec. Resou. Admin.	3276	787-4464
4008 Biltmore, Box 8004; 1316 Glen Eden Dr., 27612		
Miller, Martha M., (Ellis), Admn. Sec., For.	3566	847-9654
103 Enterprise St., Box 8006; 2400 Countrywood Rd., 27614		
Miller, N. Alexander, Coord., Resid. Scholars Prog., Stu. Aff.	2353	821-7405
102 Sullivan, Box 7316; 20 Mayo St., J-2, 27603		
Miller, Norman C., Jr., (Luella), Spec. In Charge, Food Sci. Ext.	2956	469-1667
129-B Schaub, Box 7624; 439 Kevin Way, Cary 27511		
Miller, Dr. Robert H., (Betty), Prof. & Head, Soil Sci.	2655	851-7692
2234 Williams, Box 7619; 1209 Lorimer Rd., 27606		
Miller, Samuel A., Gen. Utility Wkr., Phys. Plant	3080	839-8286
Armory Shop, Box 7219; 901-Baseament Marilyn Dr., 27607		
Miller, Dr. Terton R., (Leone), Assoc. Prof. Emer., Occup. Educ.	2234	467-1283
602 Poe, Box 7801; 808 Ralph Dr., Cary 27511		
Miller, Dr. Thomas K., III, (Patricia), Asst. Prof., Elec. & Comp. Engr.	2336	362-5551
335 Daniels, Box 7911; Rt. 2, Box 76-A, Apex 27502		
Miller, Dr. William D., (Catherine), Prof. Emer., For.		848-7322
322 Springmoor Dr., 27615		
Miller, Dr. William L., (Laura S.), Prof., Biochem. (on leave)	2581	
Miller-Haraway, Roberta G., (Rick), Res. Tech., Soil Sci.	3203	779-2494
3115 Williams, Box 7619; 8609 Lobelia St., 27603		
Milliken, Deborah D., Sales Mgr. & Buyer, Mdse. Div., SSS	2161	
SSS, Box 7224; 905 Beverly Dr., 27610		
Millikin, Julian E., (Robin), Vet. Tech., Vet. Teach. Hosp., SVM	829-4200	556-5724
4700 Hillsborough St., Box 8401; 109 Pine Ridge Ct., Wake Forest 27587		
Mills, Ceil R., Instr., Curr. & Inst.	3221	782-5755
412B Poe, Box 7801; 2401-G Still Forest Pl., 27607		
Mills, Harriet B., Hskp. Asst., Phys. Plant	3323	
Park Shops, Box 7219		
Mills, Joan S., Coord., Advising for Univ. Undesignated Freshmen, Acad. Skills Prog.	3592	942-1328
528 Poe, Box 7105; 407 Highview Dr., Chapel Hill 27514		
Mills, Joice H., Rec. Administrator, Development	7827	469-2262
1-E Holladay, Box 7502; 125 Noel Ann Ct., Cary 27511		
Mills, Margie D., (Donnie), Admn. Asst., Vice Chan., Fin. & Bus.	2155	876-8739
B Holladay, Box 7201; 4634 Grinding Stone Dr., 27604		
Mills, Matthew R., Jr., (Margaret), Purch. Off., Purch. & Stores	2171	847-1004
217 Alumni, Box 7212; 6782 Chauncey Dr., 27609		
Mills, Maury T., Lab. Ani. Tech., Biochem.	2581	779-5582
37 Polk, Box 7622; 727 Woodland Rd., 27603		
Mills, Robert J., (Susan), Agri'l. Res. Tech., Hort. Sci.	3346	772-9232
62 Kilgore, Box 7609; Box 27, Merrimac Dr., Apex 27502		
Mills, Sandra B., (David), Sec., Stu. Govt.	2797	833-6862
4130 Univ. Stu. Ctr., Box 7306; 2118 Pine Dr., 27608		
Mills, Sandra R., (Shelton), Sec., Urb. Aff.	3211	781-8004
274 McKimmon, Box 7401; 7404 Amaris Lane, 27602		
Mills, Susan A., (Bobby), Sec., Ext. Admin.	2813	772-9232
108 Ricks, Box 7602; Box 27, Merrimac Dr., Apex 27502		
Mills, Dr. William C., Jr., (Mettie), Prof. Emer., Poul. Sci. Ext.		362-6694
Rt. 2, Box 83, Apex 27502		
Mims, James D., Hskp. Asst., Phys. Plant	3323	772-6060
Park Shops, Box 7219; 206 Old Garner Rd., 27529		
Mingis, Nancy C., Res. Analyst, Hort. Sci.	3132	467-0248
254 Kilgore, Box 7609; 410 Warren Ave., Cary 27511		
Miner, Dr. Gordon S., (Linda K.), Prof., Soil Sci.	2636	847-4635
3228 Williams, Box 7619; 301 Killington Dr., 27609		
Minor, Sandi W., Clk., Gen.	2285	
3513 Gardner, Box 7614		
Minshew, Kimberly R., Sec., Anat., Physiol. Sci. & Radiol., SVM	829-4200	
4700 Hillsborough St., Box 8401		
Minter, Mary Q., Food Serv. Asst., Univ. Dining	3963	
Dining Hall, Box 7307		
Mintz, Colin S., (Virginia D.), Dist. Ext. Chm. Emer., Agri'l. Ext. Serv.		833-8586
813 Woodburn Rd., 27605		

Name, Title, Department and Address	Office Phone	Resid. Phone
Mishoe, Peggy P., Admn. Sec., Acad. Aff.-SALS 115 Patterson, Box 7601; 129 Drummond Pl., Cary 27511	2615	467-7599
Misra, Dr. Kailash C., Asst. Prof., Math 360 Harrelson, Box 8205	3796	
Mitchell, Clyde P. (Aruth), Hskp. Supv., Phys. Plant Park Shops, Box 7219; 2100 Ranch Rd., 27520	3323	553-6816
Mitchell, Dr. Gary E., (Carolyn), Assoc. Dept. Head, Prof., Physics 106 Cox, Box 8202; 2913 Harriman Ave., Durham 27705	2521	489-5320
Mitchell, Janice D., (Phil), Sec., Hist. 161 Harrelson, Box 8108; 402 Lakeside Dr., Garner	3383	772-0711
Mitchell, Dr. Karlyn, (Douglas Pearce), Asst. Prof., Ec. & Bus. 201 Patterson, Box 8109; 706 Ellynn Dr., Cary 27511	3951	467-2794
Mitchell, Lenora F., Patrol Off., Public Safety Field House, Box 7220	3206	
Mitchell, Mack, Gen. Utility Wkr., Phys. Plant Sullivan Dr., Box 7219; 1317 Holman St., 27601	3408	833-4532
Mitchell, Marvel O., Admn. Asst., Chem. Engr. 113 Riddick, Box 7905	2324	
Mitchell, Peggy R., (Vernon), Sec., Univ. Dining 3805 Beryl Rd., Box 7307; 109 N. East St., 27604	7012	782-2683
Mitchell, Richard A., Grounds Wkr., Phys. Educ. Carmichael, Box 8111; Box 98, Rt. 2, Wake Forest 27587	2487, 2488	556-5430
Mitchell, Robin G., (Brent), Clk.-Typ., Fin. & Bus. 2 Peele, Box 7213; 3531 Hwy. 70 West, Goldsboro 27530	2986	734-2568
Mitchell, Shady, (Rosemary), Main. Mech., Spec. Proj., E.S. King Vlg. Bldg. P, E.S. King Vlg., Box 7315; Rt. 5, Box 280, Zebulon 27597	2430	269-8372
Mitchell, William T., (Rebecca), Acct., Budg. Off. 206 Holladay, Box 7206; 5100 Swift Ridge Rd., 27606	2175	851-5606
Mitchener, Clifton L., Hskp., Stu. Aff. Univ. stu. Ctr., Box 7306; Rt. 1, Box 372-A, Smithfield, 27577	3340	934-6844
Mitchener, Herbert C., Jr., Patrol Off., Public Safety Field House, Box 7220	3206	
Mize, John T., Jr., (Nancy), Res. Tech., Crop Sci. USDA-ARS, 3127 Ligon St., Box 7631; 2208 Garden Pl., Apt. E, 27607	3905	828-5611
Mizelle, Edith S., (James), Sec., Ani. Sci. 231 Polk, Box 7621; Rt. 4, Box 385, 27606	2768	362-5012
Moazed, Dr. K. L., (Carolyn), Prof., Mat. Engr. 2101 Burlington, Box 7916; 2113 Myron Dr., 27607	2932, 2933	782-2880
Mochrie, Dr. Richard D., (Helene), Prof., Ani. Sci. 242A Polk, Box 7621; 505 S. Dixon Ave., Cary 27511	2766	467-1552
Mock, Dr. Gary N., (Ruth), Assoc. Prof., Text. Chem. 115 Clark, Box 8302; 1220 Manchester Dr., 27609	2551	781-0007
Mock, Dr. Judieth E., Human Environ. Spec. In Charge, Agri'l. Ext. Serv. F-1 Ricks, Box 7605; 7401 Old Hundred Rd., 27612	2770	848-0034
Modlin, Victor M., Agri'l. Res. Tech., Ent. Tidewater Res. Sta., Rt. 2, Plymouth 27962; Rt. 1, Box 537, Jamesville 27846	793-4118	792-1000
Moeller, Mark E., (Lee Anne), Asst. Dir., Wolfpack Club College Inn, Box 8602; 3000 McCullers Rd., Apex, 27502	2112	772-0418
Moffat, David V., (Patricia), Vis. Instr., Comp. Sci. 242-D Daniels, Box 8206; Rt. 7, Box 52A, Chapel Hill 27514	7479	933-6530
Mohamed, Dr. Mansour H., (Soad), Assoc. Dean, Acad. Prog., Text., Prof., Text. Engr. & Sci. 126 Nelson, Box 8301; 1926 Highland Pl., 27607	3477, 3485	782-5011
Mohanty, Dr. Bibekananda, (Danell), Agri'l. Res. Assoc., Bio. & Agri'l. Engr. 115 Weaver, Box 7625; 2804-104 Avent Ferry Rd., 27606	3101	859-0268
Mohapatra, Dr. Subhas C., (Niru), Sr. Researcher, Bio. & Agri'l. Engr. 114 Weaver, Box 7625; 1413 Boxwood Ln., Apex 27502	3101	362-7653
Mohn, Donna F., (Robert), Acct. Tech., Fin. & Bus. 2 Peele, Box 7213; 4908 Fallbrook Cir., 27604	2985	876-9872
Moll, Dr. Robert H., (Alice), Prof., Gen. 2619 Gardner, Box 7614; 5908 Woodcrest Dr., 27603	2289	772-4966

Name, Title, Department and Address	Office Phone	Resid. Phone
Monaco, Dr. Thomas J., (Virginia), Prof., Hort. Sci.	3133	467-8088
158 Kilgore, Box 7609; 301 Oregon Cir., Cary 27511		
Monahan, Dr. John F., (Karen Johnston), Assoc. Prof., Stat.	2541	782-6904
517 Cox, Box 8203; 3108 Merrienne Dr., 27607		
Monar, Bertha I., Admn. Asst., Soil Sci.	2838	787-0278
3104 Williams, Box 7619; 2405B Landmark Dr., 27607		
Monbouquette, Jenny S., (Hal), Curatorial Asst., Curator of Art	3503	851-0351
4110 Univ. Student Ctr., Box 7306; 1111-2C Crab Orchard Dr., 27606		
Moncol, Dr. Daniel J., (Nancy), Prof., Micro., Path., & Parasit., SVM ...	829-4200	779-0726
4700 Hillsborough St., Box 8401; Rt. 3, Box 207, Garner 27529		
Monroe, Dr. Robert J., Prof. Emer., Stat.	2585	787-8272
509H Cox, Box 8203; 2208 Lionel Ln., 27607		
Monteith, Dr. Larry K., (Nancy), Dean, Engr.	2311	782-6280
102 Page, Box 7901; 5000 Larchmont Dr., 27612		
Montero, Maria J., (Antonio), Typ., Col. Dev. & Acqs.	3833	851-4833
3136 H Library, Box 7111; 1609 Baker Rd., 27607		
Montgomery, Camilla W., (Paul R.), Typ., Plant Path.	2736	833-6483
2518 Gardner, Box 7616; 404 Robin Hood Dr., 27604		
Montiero, Nancy A., (Jim), Vis. Asst., Prof., Anat., Physiol. Sci. & Radiol., SVM	829-4200	848-6637
4700 Hillsborough St., Box 8401; 8420 Two Courts, 27612		
Moore, Belinda J., (Barry), Acct. Clk., Athl.	3050	934-1380
Reynolds Coliseum, Box 8501; 505 Laurel Dr., Smithfield 27577		
Moore, Dr. Catherine E., Assoc. Prof., Engl.	3870	787-1330
257 Tompkins, Box 8105; 3136 Morningside Dr., 27607		
Moore, Dr. Charles L., Sr., (Jinny), Ext. Econ., Ext. Ec. & Bus.	3107	783-6750
212 Patterson, Box 8109; 2913 Old Orchard Rd., 27607		
Moore, Clara, Food Serv. Asst., Univ. Dining	3963	
Dining Hall, Box 7307		
Moore, Cornelia B., (Rodney), Staff Dev. Spec., Human Resou.	3703	859-0358
Admn. Serv. Ctr., Box 7210; 216 Larkwood Ln., Cary 27511		
Moore, Deborah A., (Donnie E.), Data Proc. Coord., Admn. Comp. Serv. Data Proc.	2459	639-2748
12 Peele, Box 7208; Rt. 2, Angier 27501		
Moore, Delores, Comm. Cash., Laun.	2122	
Laundry, Box 7218; P.O. Box 591, Garner, 27529		
Moore, Dinah J., RN, Health Serv.	2562	
Clark Inf., Box 7304; 2819 Dove Ln., 27604		
Moore, Doratha C., (Donald J.), Admn. Asst., Admn. Comp. Serv.	2794	787-6828
B-21 Hillsborough Bldg., Box 7209; 4620 Woodridge Dr., 27612		
Moore, Earl J., Mail Clk. Supv., Phys. Plant	3974	934-4910
Leazar, Box 7219; 1625 Cleveland Rd., Clayton 27520		
Moore, Fred R., Floor Maint. Asst., Phys. Plant	3323	
Park Shops, Box 7219; 443 Glen Brook Dr., 27610		
Moore, Dr. Harry B., (Sally), Prof., Ent.	2748	851-3144
4315 Gardner, Box 7613; 3725 Eakley Ct., 27606		
Moore, Henry L., (Vivian), Stu. Aff.	2405	834-0741
Thompson Thea., Box 7306; 547 E. Davie St., 27601		
Moore, Jennifer S., (Daniel), Supv., Lg. Ani. Clinic, Vet. Teach. Hosp., SVM	829-4200	362-5549
4700 Hillsborough St., Box 8401; Rt. 2, Box 124B, Apex 27502		
Moore, June H., (John Wm.), Res. Aide, Gen.	2294	469-0097
3617 Gardner, Box 7614; 1212 Selwyn Ln., Cary 27511		
Moore, Katherine K., Lab Tech., Health Serv.	2564	552-3525
Clark Inf., Box 7304; Rt. 4, Box 15, Fuquay-Varina 27526		
Moore, Kenneth R., Acct. Clk., Capital Assets Acct.	2148	834-8452
213 Admn. Serv. Ctr., Box 7205; 700 Virginia Ave., 27604		
Moore, Martha G., (Phil), Budg. Clk., Physics	3751	782-1309
104A Cox, Box 8202; 3208 Dell Dr., 27609		
Moore, Martha W., Acad. & Career Adviser, Acad. Adv. & Place, Agril & Life Sci.	3249	832-0993
111 Patterson, Box 7601; 3207 Merriman Ave., 27607		
Moore, Mary, Hskp. Asst., Phys. Plant	3323	847-4276
Park Shops, Box 7219; 300 North Cliff Dr., 27609		

Name, Title, Department and Address	Office Phone	Resid. Phone
Moore, Nina W., (Jim), Clk.-Typ., Min. Res. Lab 180 Coxe Ave., Asheville 28801; 35 Botany Dr., Asheville, 28805	704-251-6155	704-298-3630
Moore, Pauline E., Ext. 4-H Spec. Emer., Ext. 4-H & Youth Dev. 1410-A Carnage Dr., 27610		833-0770
Moore, Robert P., (Ruth), Prof. Emer., Crop Sci. 2619 Van Dyke St., 27607		832-6881
Moore, Robin C., (Therese), Assoc. Prof., Design 319B Brooks, Box 7701; 420 Cutler St., 27603	2204	832-6858
Moore, Sarah P., Med. Lab. Tech., SVM 4700 Hillsborough St., Box 8401; 3213 Friar Tuck Rd., 27610	829-4200	
Moore, Teresa, Libr. Clk., Circ. Libr., Box 7111; 305 Dacian Rd., 27610		3364
Moore, Vaun R., (Bob), Libr. Asst., Acqs., Libr. 3123 Library, Box 7111; 706 Austin Ave., Cary 27511	3187	467-9916
Moore, Willie C., Carpenter, Phys. Plant Park Shops, Box 7219	3323	
Morant, Charles A., Maint. Mech., Phys. Plant Heating Plant, Box 7219; 723 N. 14 St., Erwin, 28339	2184	
Moreau, Dr. David H., (Polly), Dir., Water Resou. Res. Inst. 225 Page, Box 7912; 16 Kendall Dr., Chapel Hill 27514	2815	942-1878
Morehead, Dr. Charles G., (Jean), Prof. Emer., Counselor Educ. 730 Poe, Box 7801; 2517 Wake Dr., 27608	2244	782-0832
Moreland, Dr. Charles G., (Nancy P.), Asst. Head., Grad. Stu. & Prof., Chem. 10 Dabney, Box 8204; 3329 Horton St., 27607	2548	787-6163
Moreland, Dr. Donald E., (Verdie), Prof., Bot., Crop Sci., For. 4123 Williams, Box 7620; 1508 Pineview Dr., 27606	2661	851-1784
Moreland, Nancy P., (Charles), Nurse, Health Serv. Clark Inf., Box 7304; 3329 Horton St., 27607	2564	787-6163
Morgan, Clarence A., (Linda), Comp. Sales Supv., SSS SSS, Box 7224; 2401-F Wesville Ct., 27607	2161	782-2029
Morgan, D. William, (Wanda), Rad. Prot. Off., Rad. Prot. 214 Clark, Box 7108; 2609 Catalina Dr., 27607	2894	787-8637
Morgan, James E., Res. Tech., Plant Path. 2420 Gardner, Box 7616; 304 Merwin Rd., 27606	3488	851-4057
Morgan, Kirby T., Elect. Tech., Ani. Sci. Leazar, Box 7621; 1120 Villa Green Ct., 27612	2822	846-0086
Morgan, Margaret B., (Mitch), Admn. Coord., Urb. Aff. 268 McKimmon, Box 7401; 6909 Lake Wheeler Rd., 27603	2578	772-2443
Morgan, Mary J., Data Entry Oper., Reg. & Rec. 116 Harris, Box 7313; 320 S. Boylan Ave., 27603	3084	821-1226
Morgan, Mary S., Acct. Clk., Univ. Stud. 151 Harrelson, Box 7107; 2701 Milburnie Rd., 27610	2490	828-9499
Morgan, Ronnie N., Elect. Apprentice, Phys. Plant Armory Shop, Box 7219; Rt. 3, Box 263, Louisville, 27549	3080	469-6288
Morgan, Shirley M., Clk.-Typ., Agri. & Life Sci. 104 Patterson, Box 7601; 1412 Altama Cir., 27610	2666	832-4915
Morin, Elizabeth (Liz) P., (Arthur), Sec., Grad. Sch. 104 Peele, Box 7102; 8016 Hollander Pl., 27606	2394	362-7091
Morrell, Cathy C., (Ron), Purch. Asst., Purch. & Stores. Alumni, Box 7212; 112 Drumbuie Pl., Garner, 27529	2171	779-7954
Morris, Alice R., (Walter), Acct. Clk., Agri'l. Ext. Admin. 120 Patterson, Box 7601; 501 Cardinal Dr., 27604	3158	833-0870
Morris, Anita R., (John), Clk.-Typ., Admn. Comp. Serv. 1212 Blue Ridge Rd., Box 7227; 1402 Lorimer Rd., 27606	3640	851-2083
Morris, Carole B., (Robert), Res. Tech., Poul. Sci. 22 Scott, Box 7608; 3501 Leonard St., 27607	2628	781-1885
Morris, Fred, Jr., (Lenora), Floor Maint. Asst., Phys. Plant Park Shops, Box 7219; 1708 Sundial Pl., 27610	3323	833-9194
Morris, Iris W., (Bob), Photo-Typesetter, Agri'l. Comm. G-5 Ricks, Box 7603; Rt. 8, 7320 Pinecrest Rd., 27612	2791	787-1194
Morris, Peggy T., Reg. Clk., Reg. & Rec. 100 Harris, Box 7313; 1528 Crest Rd., 27606	2572	

Name, Title, Department and Address	Office Phone	Resid. Phone
Morris, Thomas B., (Louise), Ext. Prof. Emer., Poul. Sci.	2621	833-0568
210 Scott, Box 7608; 1003 Gardner St., 27607		
Morrison, Dr. John M., (Julia), Assoc. Prof., Mar., Earth & Atmos. Sci.	7449	469-0044
2281 Withers, Box 8208; 106 S. Woodshed Ct., Cary 27511		
Morton, Clyda J., (Gary), Clk.-Typ., Fin. Aid.	2421	834-1892
213 Peele, Box 7302; 535 Cooper Rd., 27610		
Morton, Harold W., (Nadine), Elec. Tech., Elec. & Comp. Engr.	2336	266-0928
111A Daniels, Box 7911; Rt. 1, 200 Ellen Dr., Knightdale 27545		
Morton, J. Geary, (Pamela), Prod.-Dir., UNC Ctr. for Pub. TV.	2853	
105 TV Ctr., Box 8601; 1630 Pineview Dr., 27606		
Morton, Pamela B., Stu. Serv. Mgr., Acad. Aff., Agri. & Life Sci.	2614	481-0327
115 Patterson, Box 7601; 116 Bay Dr., Cary 27511		
Moseley, Dr. Robert G., (Dr. Nelle), Phys., Health Serv.	2562	847-5403
Clark Inf., Box 7304; Rt. 7, Box 210-G, 27614		
Moser, Leon S., (Carolyn), Ext. Spec., Tex. Ext.	3761	872-7875
B-21 Nelson, Box 8301; 908 Langford Pl., 27609		
Moss, Dr. Arthur B., Myers Prof., Text. Mgmt. & Tech.	3442	832-7092
142-A Nelson, Box 8301; 750-301 Washington St., 27605		
Moss, Catherine A., Rec. Clk., Reg. & Rec.	2572	
100 Harris, Box 7313; 2514 Bedford Ave., 27607		
Moss, Charles E., Hskp. Asst., Phys. Plant.	3323	787-1165
Park Shops, Box 7219; 1518 Varsity Dr., 27606		
Moss, Glenn M., (Daren), Hskp. Asst., Phys. Plant.	3323	556-2042
Park Shops, Box 7219; 318 Cedar St., Wake Forest, 27587		
Motley, Marva C., (James), Dir., Stu. Admis., SVM.	829-4205	848-1124
4700 Hillsborough St., Box 8401; 9100 Ray Rd., 27612		
Mott, Dr. Ralph L., (Beverly), Prof., Bot.	3525	832-0635
1231 Gardner, Box 7612; 2534 Medway Dr., 27608		
Mowat, Dr. J. Richard, Assoc. Prof., Physics.	7914	782-8839
209 Bureau of Mines, Box 8202; 3244 Birnamwood Rd., 27607		
Mowrey, Dr. Robert A., (Peggy), Asst. Prof., Ani. Sci.	2761	552-2434
119 Polk, Box 7621; Rt. 1, Box 23, Holly Springs 27540		
Mowry, Dr. Fred L., (Barbara), Vis. Res. Assoc., Bot., Air Quality Res.	3575	489-3193
3908 Inwood Rd., Box 7632; 2911 Friendship Rd., Durham 27705		
Moxley, Nancy F., Bus. Serv. Mgr., Bus. Div.	3235	782-6640
Leazar, Box 7209; 4113 Picardy Dr., 27612		
Moxley, Robert L., (Nancy), Prof. & Grad. Admin., Soc. & Anth.	2702	782-6640
341 1911 Bldg., Box 8107; 4113 Picardy Dr., 27612		
Moxley, William C., (Joyce), Kit. Mgr., Univ. Dining.	2021	467-5743
Univ. Stu. Ctr., Box 7307; 100 Steel Trap Ct, Cary 27511		
Moye, Susan L., Vet. Tech. Hosp., SVM.	829-4200	
4700 Hillsborough St., Box 8401		
Moyer, Dr. James W., (Mary), Assoc. Prof., Plant Path.	2735	469-1955
2610 Gardner, Box 7616; 1204 Gray Owl Garth, Cary 27511		
Mozley, Dr. Samuel C., (Ganey), Assoc. Prof., Zool.	2589	851-9673
4115 Gardner, Box 7617; 4809 Waybridge Court, 27606		
Mrozek, Dr. Edward, Jr., (Michele), Ext. Spec., Comp. Serv., Ext. Admin. ...	3727	851-5408
1111 Grinnells Lab., Box 7626; 5308-A Wayne St., 27606		
Muehl, Carina M., Vet. Tech., Vet. Teach. Hosp. SVM.	829-4200	596-5720
4700 Hillsborough St., Box 8401; 3 Scottybrook Ct., Durham, 27703		
Mueller, Dr. J. Paul, (Judy), Prof. & Ext. Spec., Crop Sci. Ext.	2246	781-9673
2412 Williams, Box 7620; 2115 Manuel St., 27612		
Muhammad, Naomi S., Clk.-Typ., Bio. & Agri'l. Engr.	3723	876-9617
622 Downtown Blvd., Box 7625; 809 Navaho Dr., 202, 27609		
Mulholland, Dr. James A., (Marilyn), Assoc. Prof., Hist.	2483	851-5073
125 Harrelson, Box 8108; 1400 Kent Rd., 27606		
Mulligan, Dr. James C., (Jackie), Prof. & Grad. Administrator, Mech. & Aero. Engr.	2365	876-5855
3175 Broughton, Box 7910, 912 Indian Tr., 27609		
Mullin, Dr. Robert B., (Viola), Asst. Prof. of Rel., Phil. & Rel.	3214	783-6845
110 Winston, Box 8103; 120 Dartmouth Rd., 27609		

Name, Title, Department and Address	Office Phone	Resid. Phone
Mumford, Barnes P., HVAC Mech., Phys. Plant Armory, Box 7219; 311 King Arthur Trail, Garner, 27529	3080	772-0387
Mumford, Lessie M., Hskp. Asst., Phys. Plant Park Shops, Box 7219	3323	
Munden, Roy, Supt., Trade Serv., Phys. Plant 2 Park Shops, Box 7219; Rt. 3, Box 441, Four Oaks 27524	3323	963-3693
Munger, Edna J., (Laddie), Word Proc., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 1001 Washington St., Cary 27511	829-4200	481-1127
Munn, Dr. Harry E., Jr., Assoc. Prof., Speech-Comm. 217A Winston, Box 8104; 4005 Evans Dr., 27610	2450	781-5566
Munn, R. Hugh, (Patricia), Sec., Nuc. Engr. 1110 Burlington, Box 7909; 418 Charles Ct., Cary 27511	2301	467-2039
Murchison, Bettie E., (James), Photo Asst., Agri'l. Comm. 12 Ricks, Box 7603; 4315 Lake Ridge, 27604	2861	872-2697
Murphey, Carl B., (Lois), Res. Tech., Plant Path. 1412 Gardner, Box 7616; 2500 Murphy Rd., Clayton 27520	2711	553-3857
Murphrey, Ernest G., Dir., Univ. Acct., Fin. 201 Admn. Serv. Ctr., Box 7205; Box 24, Polks Landing, Chapel Hill 27514	3824	933-0796
Murphy, Charles A., Stk. Clk., Chem. 314 Dabney, Box 8204; 1102 Carlton St., 27606	2547	834-0998
Murphy, Dr. J. Paul, Asst. Prof., Crop. Sci. 1301 Williams, Box 7620; 1514 Boxwood Dr., Apex, 27502	2704	821-1357
Murphy, James C., Comp. Oper. Mgr., Comp. Ctr. 127 Hillsborough Bldg., Box 7109; Rt. 1, Box 117, Kittrell 27544	2517	492-7738
Murphy, Roy V., (Rebecca), Main. Mech., Civil Engr. 30 Riddick, Box 7908; Rt. 2, Box 278-A, 27610	3423	772-7097
Murphy, Shelton, Univ. Stu. Fellowship/Coop. Campus Min. Box 7306; 3212-D Calumet Dr., 27610	821-1608	
Murray, Clara C., Sec., Grad. Sch. 104 Peele, Box 7102; 508 Royal Oak Dr., Garner 27529	2872	772-8741
Murray, Elaine J., (Tommy), Sec., Elec. & Comp. Engr. 432 Daniels, Box 7911; 302 Pearson St., Apex, 27502	2336	362-4055
Murray, James D., Dir. MAS, UNC Sea Grant 105 1911 Bldg., Box 8605; 508 Lochness Lane, Cary 27511	2454	481-3544
Murray, Pamela U., (Marty), Clk.-Typ., Math 357 Harrelson, Box 8205; 5301 Lake Wheeler Rd., 27603	3796	779-3096
Murray, Dr. Raymond L., (Elizabeth), Prof. Emer., Nuc. Engr. 3124 Burlington, Box 7909; P.O. Box 5596, 27650		847-5030
Murray, Wanda W., (Bobby), Admn. Asst., SVM 4700 Hillsborough St., Box 8401; 613 S. Lakeside Dr., 27606	829-4307	851-3328
Murty, Dr. K. Linga, (Veni), Prof. & Grad Admin., Nuc. Engr. 1120 Burlington, Box 7909; 101 Thresher Ct., Cary 27511	3657	781-1807
Muse, Ann F., Nurse, Clark Inf. Clark, Box 7304; 5145 Jeffries Rd., 27606	2564	851-3552
Musselwhite, Linda R., (Lee), Clk., Development 1-E Holladay, Box 7502; 607 Nellane, Garner 27529	7827	779-5701
Musselwhite, Margaret S., Res. Spec., Soil Sci. 3411 Williams, Box 7619; 221 Hawthorne Rd., 27605	2600	834-0696
Musser, Wendy B., (Charlie), Art.-Illus., Agri'l. Comm. 2318 Library, Box 7111; 323 Hudson St., 27608	3971	821-3494
Must, Thomas L., Ind. Hyg., Public Safety Field House, Box 7220	2568	
Mustian, Dr. R. David, (Ann), Prof., & State Ldr. of Evaluation, Agri'l. Ext. Serv., Adult & Comm. Coll. Educ. 111 Ricks, Box 7607; 5801 Tanglewood Dr., 27604	2819	876-4392
Myatt, W. Dale, Lab Mechanic, Mech. & Aero. Engr. 1223 Broughton, Box 7910; Rt. 2, Willow Springs 27592	2365	552-6748
Myers, James A., (Marlene), Sys. Analyst, Admn. Comp. Serv. 1212 Blue Ridge Rd., Box 7227; 7341 Shellburne Dr., 27612	3640	847-3956
Myers, Peggy, Sec., Athl. Case Athl. Ctr., Box 8501; 325 Shepherd St., 27607	2560	834-1289
Myers, Richard M., (Frances), Prof., Ani. Sci. 225 Polk, Box 7621; 325 Shepherd St., 27607	2764	834-1289

Name, Title, Department and Address	Office Phone	Resid. Phone
Mykita, Dr. Larsya, Asst. Prof., For. Lang. & Lit. 130 1911 Bldg., Box 8106; 620 W. Lane St., 27601	2475	821-4021
Myrick, W. Darrell, Mgr., User Serv., Comp. Ctr. 1304 Library, Box 7109; 1430 Lake Dam Rd., 27606	2517	851-4793
N		
Nader, Joellen M., Sgt., Public Safety Field House, Box 7220	2156	
Nader, Paul B., Anat. Lab. Tech., SVM 4700 Hillsborough St., Box 8401; 2336 New Bern Ave., 27610	829-4381	828-8542
Naderman, Dr. George C., (Pat), Assoc. Prof., Soil Sci. 3403 Williams, Box 7619; 1024 Tanglewood Dr., Cary 27511	3285	467-3760
Nagel, Olga, (Robert T.), Vis. Lect., For. Lang. 118 1911 Bldg., Box 8106; 6309 Valley Estates Dr., 27612	2475	787-7086
Nagel, Dr. Robert T., (Olga), Assoc. Prof., Mech. & Aero. Engr. 2217 Broughton, Box 7910; 6309 Valley Estates Dr., 27612	2365	848-8186
Nagle, Dr. Troy H., (Sherra), Prof., Elec. & Comp. Engr. Box 7911; 1004 Demerius St., Durham 27701	2336	688-4252
Nahikian, Dr. Howard M., (Nancy), Prof. Emer., Math. 211 Harrelson; 3116 Leonard St., 27607	3320	787-5928
Naik, Dr. Shubhada M., Res. Tech., Biochem. 339 Polk, Box 7622; 5204 Woodvalley Dr., 27612	2581	847-5550
Namkoong, Dr. Gene, For. Serv., USDA Prof. Gen., For. & Biomath., Gen. 2543 Gardner, Box 7614; 811 Beaver Dam Rd., 27607	2287	834-8850
Nance, Lisa N., Clk.-Typ., Food Sci. 129 Schaub, Box 7624; Rt. 7, Box 98-BB Louisburg 27549	2956	556-2494
Narayan, Dr. Jagdish, Prof., Mat. Engr. 2153 Burlington, Box 7916; 4917 Springwood Dr., 27612	7874	846-7233
Narron, Patsy L., (Larry), Sec., Ani. Sci. 123 Polk, Box 7621; Rt. 1, Box 307B, Middlesex 27557	2755	284-5336
Nasisse, Dr. Mark P., Asst. Prof., Ophthalmology, Comp. Ani. & Sp. Species Med., SVM 4700 Hillsborough St., Box 8401; 6000 Oxford Green Dr., Apex 27502	829-4276	779-2331
Nations, Mary, Programmer, Stat. 1509 Varsity Dr., Box 8203; 2405 Clark Ave., 27607	3311	833-4549
Nau, Dr. James M., (Benjie), Asst. Prof., Civil Engr. 412 Mann, Box 7908; 2111 Reaves Dr., 27608	2331	833-9280
Navarro, Anne D., (Rene), Libr. Asst., Monographic Cat. Library, Box 7111; 1218 A Carlton Ave., 27606	2603	833-5602
Navarro, Rene A., (Anne), Res. Tech., Crop Sci. 1301 Williams, Box 7620; 1218-A Carlton Ave., 27606	2704	833-5602
Navey, Sally W., (Robert), Pers. Sec., Univ. Dining 217 Harris, Box 7307; 4808 Rampart St., 27609	3090	787-4392
Naylor, Simon, Libr. Asst., Periodicals G-114 Library, Box 7111; 3104 Douglas St., 27607	3136	
Neal, Marion B., (Bob G.), Acct., Budg. Off. 206 Holladay, Box 7206; 6801 Holly Springs Rd., 27606	2175	851-2057
Neal, Dr. Robert A., Adj. Prof., Ent. CIIT, Res. Triangle Park; 2700 Toxey Dr., 27609	541-2070	787-4372
Neely, Katharine T., Sec., Hort. Sci. 132 Kilgore, Box 7609	3133	
Neely, E. Robert, II, (Katharine), Res. Tech., Bot. 2203 Gardner, Box 7612	3600	
Negishi, Dr. Masahiko, Adj. Assoc. Prof., Anat., Physiol. Sci. & Radiol., SVM NIEHS, Res. Tri. Pk., Box 8401		
Neighbors, Jesse C., Patrol Off., Public Safety Field House, Box 7220	3206	
Nelson E. Kathleen, Dist. Home Ec. Prog. Ldr. Emer., Agri'l. Ext. Serv. 1324 Mayfair Rd., 27608		782-0483

Name, Title, Department and Address	Office Phone	Resid. Phone
Nelson, Edward, Jr., Food Serv. Asst., Univ. Dining Dining Hall, Box 7307; 8025 Saunder St., 27603	3963	
Nelson, Dr. Larry A., Prof., Stat. & For. 606 Cox, Box 8203; 1422 Banbury Rd., 27607	2534	782-5261
Nelson, Lydia C., (Paul), Res. Tech., Soil Sci. 3309 Williams, Box 7619; 1927 Bernard St., 27608	2636	834-1655
Nelson, Dr. Paul V., (Jeanne), Prof., Hort. Sci. 126 Kilgore, Box 7609; 3404 Wembley Ct., 27607	3132	782-6258
Nerden, Dr. Joseph T., (Lillian), Prof. Emer., Ind. & Tech. Educ. 730 Poe; 2201 Coley Forest Pl., 27607		787-4207
Neuman, Dr. Duane F., (Sally), Ext. Prof., Ec. & Bus. 308C Hillsborough Bldg., Box 8110; 3117 Glenridge Rd., 27604	2472	872-7977
Neunzig, Dr. Herbert H., (Carolyn), Prof., Ent. 3301 Gardner, Box 7613; 11728 Man O'War Tr., 27612	2745	847-5470
Newby, Dr. Gordon D., Assoc. Prof., Hist. 126 Harrelson, Box 8108; 3505 Horton St., 27607	2485	782-3332
Newman, Dr. H. Carlton, (Debby), Vis. Prof., Surgery, Com. Ani. & Sp. Species Med., SVM 4700 Hillsborough St., Box 8401; 6503 English Oaks, 27609	829-4365	848-2210
Newman, Dr. Slater E., (Patricia), Prof., Psy. 750 Poe, Box 7801; 315 Shepherd St., 27607	2251	821-2014
Newmark, Dr. Craig M., (Betsy), Asst. Prof., Ec. & Bus. 4-B Patterson, Box 8109; 1343 Gardencrest Cir., 27609	2605	783-6354
Newnam, Michael R., (Sherry), Agri'l. Res. Tech., Plant Path. 3410 Gardner, Box 7616; 18 Brad Ct., Apex 27502	2751	779-5947
Newsome, William T., Libr. Clk., Monographic Cat. 1121 Library, Box 7111; Rt. 2, Box 247, 27610	2603	772-3081
Newton, Erin O., (Randall Lathan), Sec., Ec. & Bus. 211 Hillsborough Bldg., Box 8110; 3930-D Marcom St. 27606	3884	832-2979
Newton, Martha S., Sec., Stu. Dev. 214 Harris, Box 7314; 2127 A Gorman St., 27606	2441	851-2255
Nicdao, Lorene J., Sec., Ext. For. Resou. 3033 Biltmore, Box 8003	3386	
Nicholas, Andrew K., (Dianne), Comp. Sys. Coord., Hort. Sci. 59 Kilgore, Box 7609; 724 Linda Ct., Cary 27511	3346	467-4406
Nicholas, Harry M., Comp. Prog., Stat. 506-B Cox, Box 8203; 120 Carmichael Ct., Cary 27511	2584	467-7877
Nichols, Dr. Scott E., Res. Assoc., Gen. 2548 Gardner, Box 7614; 107 Bethenia Pl., Cary 27511	2289	469-1327
Nichols, Dr. T. Everett, Jr., (Jean), Prof. Emer., Ec. & Bus. 215-A Patterson, Box 8109; Rt. 8, Box 73-A, 27612	2256	787-0167
Nicholson, Barbara W., (Carlton), Sec., Civil Engr. 208 Mann, Box 7908; 1024 Greenwich St., 27610	2331	834-4627
Nickalson, J. Barry, Patrol Off., Public Safety Field House, Box 7220	3206	
Nickel, Dr. Paul A., (Virginia), Prof., Math. 331 Harrelson, Box 8205; 5017 Raintree Ct., 27609	2386	787-2218
Nickerson, Dr. Gifford S., (Janet), Assoc. Prof., Soc. & Anth. 228 1911 Bldg., Box 8107; 409 Stacy St., 27607	2491	832-7665
Nielsen, Dr. Lowell W., (Davora), Prof. Emer., Plant Path. 3418 Gardner, Box 7616; 24 Springmoor Dr., 27609	2751	848-7024
Nifong, Jeff A., (Candace), Instru. Mkr., Engr. Res. Serv. Div. 1136 Burlington, Box 7903; 816 Brent Rd., 27606	2834	851-6526
Nilsson, Dr. Arne A., (Ingrid), Assoc. Prof., Elec. & Comp. Engr. 316 Daniels, Box 7911; 3217 Brennan Dr., 27612	2336	847-8904
Nipper, Judy P., (Joe), Sec., Pol. Sci. & Pub. Admin. 222 Link Bldg., Box 8102; 222 Lane of Tristram, Garner 27529	2481	779-3119
Nittrouer, Dr. Charles A., (Debbie), Assoc. Prof., Mar., Earth & Atmos. Sci. 127 Withers, Box 8208; 1221 Tarbert Dr., Cary 27511	7912	467-2890
Nixon, Brookie L., (Rich), Admn. Sec., SVM 4700 Hillsborough St., Box 8401; Buckskin Dr., Clayton, 27520	829-4212	553-5950
Nixon, Cassandra R., Vet. Tech. Hosp., SVM 4700 Hillsborough St., Box 8401	829-4200	

Name, Title, Department and Address	Office Phone	Resid. Phone
Nixon, Janice B., Admn. Asst., Agri'l. Comm.	2804	876-4991
118 Ricks, Box 7603; 3432 Cheyenne Rd., 27609		
Nixon, Raymond L., Hskp. Asst., Univ. Graphics	2131	
Sullivan Dr., Box 7226; 1312 Battery Dr., 27610		
Nixon, Susanne W., (Mickey), Sec., Ani. Sci.	2761	553-6541
109 Polk, Box 7621; 537 O'Neil St., Clayton, 27520		
Noble, Dr. Richard L., (Priscilla), Prof., Zool. & For.	2741	469-5119
2111 Gardner, Box 7617; 123 Clancy Cir., Cary 27511		
Noe, Dr. James P., (Jane), Res. Assoc., Plant Path.	2751	833-7807
3415 Gardner, Box 7616; 2507 Vanderbilt Ave., 27607		
Noga, Dr. Edward J., Asst. Prof., Comp. Ani. & Sp. Species Med., SVM	829-4236	834-5650
4700 Hillsborough St., Box 8401; 730-301 Washington St., 27605		
Noggle, Dr. G. Ray, (Ruth), Prof. Emer., Bot.	3403	828-1893
3108 Gardner, Box 7612; Apt. 205A, 501 E. Whitaker Mill Rd., 27608		
Nordan, Elizabeth H., Admn. Asst., Bio. & Agri'l. Engr.	2694	894-5690
100 Weaver, Box 7625; Rt. 1, Benson 27504		
Norris, Bobby W., Elect., Phys. Plant ...	3080	772-7616
Armory, Box 7219; Rt 1, Box 304, Apex, 27502		
Norris, Dennis V., (Gloria), Comp. Oper. Mgr., Admn. Comp. Serv.	2459	779-0764
12 Peele, Box 7208; 8104 Lake Shore Dr., Garner 27529		
Norris, Donna D., (James G., Jr.), Data Entry Oper., Agri'l. Ext.	2983	772-7173
110 Brooks Ave., Box 7602; 1704 Spring Dr., Garner 27529		
Norris, Edward, (Mary), Plant Maint. Supv., Trades, Phys. Plant	3381	467-8815
107 Armory, Box 7219; 422 Walnut St., Cary 27511		
Norris, Rev. June, Stu. Dev./Coop. Campus Min.	834-2611	
Box 7306; P.O. Box 5626, 27650		
Norris, Dr. Larry K., Asst. Prof., Math.	3265	848-0234
328 Harrelson, Box 8205; 6519 Hearstone Dr., 27609		
Norris, Lynn R., (Patrick), Libr. Asst., Acq., Libr.	3188	787-0075
3108A Library, Box 7111; 201 Dartmouth Rd., 27609		
North, Alan J., NCOIC Dept. Administrator, AFROTC	2417	
145 Reynolds Coliseum, Box 7308; 521 Grove Ave., 27606		
North, Lisa E., Teller, Credit Union	2686	
2802 Hillsborough St., Box 8609		
Norton, Everett L., (Dot), Dist. Ext. Chm. Emer., Agri'l. Ext. Serv.		833-5509
809 Woodburn Rd., 27605		
Norwood, Bobbie S., Comp. Oper. Mgr., Dairy Rec. Proc. Ctr.	7828	833-0264
Leazar, Box 7623; 2810 Fowler Ave., 27607		
Novitzky, William P., (Roseann), Chemist, Crop Sci.	2661	851-0571
4112 Williams, Box 4620; 309 Heidinger Dr., Cary 27511		
Nowaczyk, Tina M., (Jerry), Sec., Plant Path.	2721	848-4773
2418 Gardner, Box 7616; 2400 Village Grove Rd., 27612		
Nowell, George L., Hskp., Univ. Dining	3270	
Erdahl-Cloyd Annex, Box 7303; 216 N. Person		
Nunnally, Lucy B., Tech. For. Serv., USDA, Gen.	2287	781-6708
2543 Gardner, Box 7614; 4017 Converse Dr., 27609		
Nunnally, Dr. Stephens W., (Joan), Prof. Emer., Civil Engr.		305-777-5296
474 St. Lucia Court, Satellite Beach, FL 32937		
Nusbaum, Dr. Charles J., (Virginia), Prof. Emer., Plant Path.	2751	848-7275
3415 Gardner, Box 7616; Apt. 275 Springmoor Dr., 27609		
Nuttle, Dr. Henry L. W., (Heidi), Assoc. Prof., Ind. Engr.	2362	781-2191
336 Riddick, Box 7906; 2204 Tyson St., 27612		
Nychka, Dr. Douglas W., (Helen), Asst. Prof., Stat.	2534	
608-F Cox, Box 8203		
Nye, Margaret M., (Phares), Payroll Clk., Univ. Dining	7012	851-5866
3805 Beryl Rd., Box 7307; 4908 Dan David Dr., 27606		

O

Oakley, Bonnie P., (Johney), Acct. Clk., Accts. Pay.	2130	821-5107
213 Admn. Serv. Ctr., Box 7204; Rt. 9, Box 97, 27606		

Name, Title, Department and Address	Office Phone	Resid. Phone
Oakley, Ernest L., Hskp Supv., Phys. Plant Park Shops, Box 7219; 600 Sherry Brook Dr., 27610	3323	839-8692
Oakley, Randall W., Res. Asst., For. 3026A Biltmore, Box 8002; 3504 Palm Ct., Apt. 204, 27607	2891	781-3025
Oates, John A., (Pat), Pers., AFROTC 145 Reynolds Coliseum, Box 7308; 146 Pineland Cir., 27606	2417	851-8351
Obermiller, John D., (Lisa), Agri'l. Res. Analyst, Hort Sci. 2016 Fanning Bridge Rd., Fletcher Rt. 7, Box 119, Hendersonville 28739	704-684-3562 704-891-8841	
O'Brien, Daphne H., (Michael), Lect., Engl. 232 Tompkins, Box 8105; 2709 Rothgeb Dr., 27609	3870	
O'Brien, Dr. Gail W., (John), Assoc. Prof., Hist. 131 Harrelson, Box 8108; 2605 Clark Ave., 27607	2484	832-2486
O'Brien, Margaret G., Reg. Supv., Reg. & Rec. 100 Harris, Box 7313	2572	
O'Cain, T. Michael, (Nancy), Asst. Football Coach, Athl. Weisiger-Brown Athl. Fac., Box 8502; 6200 Dixon St., 27609	2630	782-1313
Ocamb-Basu, Cynthia M., (Biman), Agri'l. Res. Tech., Plant Path. 2412 Gardner, Box 7616	2722	
Ocko, Dr. Jonathan K., (Agatha), Assoc. Prof., Hist. 137 Harrelson, Box 8108; 5033 Quail Hollow Dr., 27609	2484	876-1557
O'Connell, Kevin B., (Rebecca), Asst. Dir., Athl. Case Athl. Ctr., Box 8501	3045	848-3212
O'Connell, Steven P., Lab. Ani. Tech., Lab. Ani. Resou., SVM 4700 Hillsborough St., Box 8401; 718 Hampstead Pl., 27610	829-4201	821-4382
Oglesby, Dr. Charles L., (Betty), Counselor, Counseling Ctr. 200 Harris, Box 7312; 5113 Kaplan Dr., 27606	2423	851-0415
Oglesby, Elizabeth (Betty) H., Clk.-Typ., Housing and Resid. Life 201 Harris, Box 7315; 3208 Fairforest Pl., 27604	2440	876-2103
O'Grady, Dr. Peter J., (Mary), Assoc. Prof., Ind. Engr. 210 Park Shops, Box 7906; 206 Lawrence Rd., Cary 27511	2361	469-6934
Okoh, Barbara J., (Victor), Food Serv., Univ. Dining Bragaw Snack Bar, Box 7307; 411 Lakeside Dr., Garner, 27529	3095	772-7927
Olander, Dr. Karen A., Lect., Engl. 281 Tompkins, Box 8105; 501 Driewood Ct., 27609	3863	782-8558
Oldham, Dr. Conniesue B., (Walt), Asst. Prof., Ind. Engr. 336-A Riddick, Box 7906; 516 Greenwood Dr., Cary 27511	2363	467-0735
O'Leary, Catherine, Food Serv. Asst., Univ. Dining Dining Hall, Box 7307	3963	
Olf, Dr. Heinz G., Prof., Wood & Paper Sci. 2111 Biltmore, Box 8005; 109 Flora MacDonald Ln., Cary 27511	2888	469-0907
Olive, Kenneth M., Maint. Mech., Phys. Plant Heating Plant, Box 7219; Rt. 1 Box 40, Garner, 27529	2184	
Olive, Peggy E., (Bill), Admn. Asst., Grad. Sch. 103 Peele, Box 7102; 4001 Pine Knoll Dr., 27604	2872	876-8817
Oliver, Glenn W., (Tonya), Res. Tech., Crop Sci. Ext. Weed Sci. Ctr., 3123 Ligon St., Box 7627; 8613 Holly Springs, 27502	3652, 2866	362-1300
Oliver, Grover C., (Thelma), Agri'l. Res. Tech., Crop Sci. 3709 Hillsborough St., Box 8604; 5945 Yates Mill Pond Rd., 27606	2827	851-4972
Ollis, Dr. David F., (Marcia), Dist. Prof., Chem. Engr. 225 Riddick, Box 7905; 2 Foxridge Rd., Chapel Hill, 27514	2499	968-4020
Olney, Rev. W. W., Presbyterian Chapl., Coop. Campus Min. 27 Horne St.; Box 25-G, Rt. 3, Carthage 28327	834-5184	947-2310
Olsen, Dr. Bernard M., (Irene), Prof. Emer., Ec. & Bus. 318 Hillsborough Bldg., Box 8109; 2912 Wycliff Rd., 27607	3041	782-2011
Olson, Dr. Delmar W., Prof. Emer., Sch. of Educ. 46 Springside Dr., Hendersonville 28739		704-697-2340
Olson, Dr. Neil C., (Peggy), Assoc. Prof., Anat., Physiol. Sci. & Radiol., SVM 4700 Hillsborough St., Box 8401; 8709 Catamaran Dr., 27609	829-4228	847-3781
Olson, Wendy L., (Brian Dodge), Agri'l. Res. Tech., Ent. Unit 1, 840 Method Rd., Box 7628; 529 Lakeshore Dr., Hillsborough 27278	2638	732-2783
O'Neal, Clyde, (Amy V.), Hskp. Asst., Phys. Plant Park Shops, Box 7219; Rt. 2, Garner, 27529	3323	779-4522

Name, Title, Department and Address	Office Phone	Resid. Phone
O'Neal, Jesse R., Hskp. Asst., Phys. Plant Park Shops, Box 7219; Rt. 1, Box 2195, Zebulon, 27597	3323	269-7784
O'Neal, Dr. John B., Jr., (Mary), Prof., Elec. & Comp. Engr. 320-A Daniels, Box 7911; 4516 Pamlico Dr., 27609	3015	787-3804
O'Neal, Lucille E., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 209 Myers Ave., 27604	3323	821-1679
O'Neal, Mary, (Ben), Prog. Coord., Campus Min. 1200 Univ. Stu. Ctr., Box 7306; 4516 Pamlico, 27609	2414	787-3804
Openshaw, Dr. Martin G., Ext. Prog. Leader, REE, Soil Sci. Apartado 248, Lima 100, Peru, Box 8109	2258	
Ormond, I. Franklin, III, Lect., Phys. Educ. 2041 Carmichael, Box 8111; 110 Cedar Ln., Garner, 27529	2487, 2488	772-4990
Orndorff, Dr. Paul E., Asst. Prof., Micro., Path. & Parasit., SVM 4700 Hillsborough St., Box 8401; 4021 Spruce Dr., 27612	829-4207	782-7832
Ort, Deborah T., (Jon), Res. Tech., Poul. Sci. 113 Scott, Box 7608; 2808 Fordham Lane, 27604	2623	876-9107
Ort, Dr. Jon F., (Deborah), Assoc. Prof., Poul. Sci. 110 Scott, Box 7608; 2808 Fordham Ln., 27604	2628	876-9107
Osborne, Delta J., Res. Tech., Poul. Sci. Ext. 201 Scott, Box 7608; 2702 Vanderbilt Ave., 27607	2621	
Osborne, Donald W., (Wilma), Mech., Phys. Plant Armory, Box 7219; 7805 S. Texas Dr., 27605	3080	872-1265
Osburn, Dr. Carlton, (Mary Anna), Prof., Elec. & Comp. Engr. 430 Daniels, Box 7911; 103 Homestead Dr., Cary 27511	2336	469-8167
Osegueda, Laura M., Ref. Librn., Libr. 1140 Library, Box 7111; 16 Turner St., 27607	2935	834-1024
O'Sullivan, Dr. Elizabethann, (Douglas G. Hale), Assoc. Prof., Pol. Sci. & Pub. Admin. 219 Link Bldg., Box 8102; 3422 Leonard St., 27607	2481	787-9360
O'Sullivan, Joan N., Res. Asst., Elec. & Comp. Engr. 112 Daniels, Box 7911; 2401-D Landmark, 27607	2878	787-8294
Osuna, Dr. Deborah J., Resid., Sm. Ani. Surgery, SVM 4700 Hillsborough St., Box 8401	829-4200	
Otto, Dr. Luther B., (Nancy), Prof. & Head, Soc. & Anth. 301 1911 Bldg., Box 8107; 2408 Eddystone Dr., 27612	3180	782-8137
Otto, Paul S. (Vicky), Univ. Feed Mill Oper., Poul. Sci. Univ. Res. Farm 2, Box 7608; Rt. 1, Box 225-B, Smithfield 27577	3384	934-9539
Outlaw, Diane B., (Larry), Ctr. Reservationist, McKimmon Ctr. 225 McKimmon, Box 7401; 3608 Blue Ridge Rd., 27612	2277	
Overcash, Dr. Michael R., (Mary), Prof., Chem. Engr. 317 Riddick, Box 7905; 2908 Chipmunk Ln., 27607	2325	782-7385
Overstreet, Ava J., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 312 New Rand Rd., Garner, 27529	3323	772-1545
Overton, Brenda O., Sec., Wolfpack Club College Inn, Box 8602; 1508-D Collegeview Ave., 27606	2112	833-4443
Overton, Dr. Margery F., (Douglas Bell), Asst. Prof., Civil Engr. 319-D Mann, Box 7908; 2402 Glendale Ave., Durham 27704	2331	471-9729
Owen, Hubert L., (Ann Ree "Bunny"), Asst. Prof., Physics 210 Bur. of Mines, Box 8202; 1625 Glenwood Ave., 27608	7457	828-7114
Owen, W. James, Lect., Engl. 264 Tompkins, Box 8105; 3205 Hillsborough St., 27607	3870	832-9857
Owens, M. Catherine, (R. F.), Sec., Integr. Man. Sys. Engr. Inst. 2232 Broughton, Box 7915; P.O. Box 18252 27619	3808	782-2286
Owens, Sandra P., Admn. Sec., SVM 4700 Hillsborough St., Box 8401	829-4210	
Oxender, Dr. Wayne D., Prof. & Head, Food Ani. & Equ. Med., SVM 4700 Hillsborough St., Box 8401; 103 Crimmons Cr., Cary 27511	829-4240	469-2592
Oxendine, Kimmy (Ray), R., (Paula), Int. Auditor, Int. Audit B Holladay, Box 7202; 2408 G Wesvill Ct., 27607	3289	782-6504
Ozisik, Dr. M. N., (Gul), Prof., Mech. & Aero. Engr. 4209 Broughton, Box 7910; 809 Currituck, 27609	3024	787-2227

Name, Title, Department and Address	Office Phone	Resid. Phone
P		
Packer, Judith W., (Jed), Pub. Info. Asst., Alumni Rel.	3375	851-7230
Alumni, Box 7503; 1313 Ashburton Rd., 27606		
Padgett, Barbara M., Budg. Clk., Gen.	3152	772-1126
3513 Gardner, Box 7614; 1204 Meadowbrook Dr., Garner 27529		
Padgett, Bill R. W., Jr., (Bett), Prog. Conslt., Comp. Ctr.	2517	834-4636
B-17-F Hillsborough Bldg., Box 7109; 18 Dixie Tr., 27607		
Padgett, Lynn B., (Thomas), Res. Publ. Ed., Agri'l. Comm.	3173	781-4540
318 Ricks, Box 7603; 1322 Brooks Ave., 27607		
Paesler, Dr. Michael A., (Christine Kennedy), Asst. Prof., Physics	2515	848-1007
406-B Cox, Box 8202; 8320 Sleepy Creek Dr., 27612		
Page, Douglas A., Safety Inspector, Public Safety,	7915	
Field House, Box 7220		
Page, Dr. Lavon B., Assoc. Prof., Math.	7909	834-8063
315 Harrelson, Box 8205; 5529 Earle Rd., 27606		
Page, Dr. Rodney L., (Susan), Asst. Prof., Comp. Ani. & Sp. Species Med., SVM	829-4334	851-5526
4700 Hillsborough St., Box 8401; 4301 Hunters Club Dr., 27606		
Page, Thurman, Food Serv. Asst., Univ. Dining	3963	833-6104
Dining Hall, Box 7307; 2204 Nelson St., 27610		
Paget, Edwin H., (Veronica), Assoc. Prof. Emer., Engl.		832-3495
2733 Everett, 27607		
Pai, Girish A., (Tulasi), Res. Asst., Text. Engr. & Sci.	3469	833-0392
B-8A, Box 8301; 2715 Conifer Dr., Apt. D, 27606		
Paige, Nancy E., Clk.-Typ., Fin. & Bus.	2987	894-4257
2 Peele, Box 7213; P.O. Box 493, Benson 27504		
Paisley, Michael J., (Teresa), Res. Asst., Mat. Engr.	2347	779-3659
2 Riddick, Box 7907; 1903 Ford Gates Dr., Garner 27529		
Paisley, Robert T., (Pamela), Asst. Dir., Stu. Family Housing	2430	6537
Bldg. P, E.S. King Vlg., Box 7315; N-21 King Village, 27607		
Palmer, Gwendolyn E., (Edward W.), Agri'l. Res. Tech., Plant Path.	3962	471-2935
Unit 3, 840 Method Rd., Box 7629; 608 Hammond St., Durham 27704		
Palmer, Janet T., Lect., Engl.	3854	467-0801
G124 Tompkins, Box 8105; 110 Flora MacDonald Ln., Cary 27511		
Palmer, Paul L., Hskp. Asst., Phys. Plant	3323	779-1469
Park Shops, Box 7219; 601 Church Rd., 27603		
Palmour, Dr. Hayne, III, (Barbara), Prof., Ceramic Engr., Mat. Engr.	2377	832-0782
229 Riddick, Box 7907; 2707 Mayview Rd., 27607		
Palmquist, Dr. Raymond B., (Janet), Assoc. Prof., Ec. & Bus.	3881	851-7048
209-B Hillsborough Bldg., Box 8110; 1613 Westhaven Dr., 27607		
Panee, Eli D., Dir., Spec. Proj./E.S. King Vlg.	2430	851-2617
Bldg. P, E.S. King Vlg., Box 7315; 3700 Lail Cr., 27606		
Pantula, Dr. Sastry G., (Janella), Asst. Prof., Stat.	2531	832-3674
612-F Cox, Box 8203; 408-C Horne St., 27607		
Pao, Dr. Chia-Ven, (Mei-Shan), Prof., Math.	7453	847-4341
334 Harrelson, Box 8205; 8725 Fort Macon Ct., 27614		
Pao, Mei-Shan K., (Chia-Ven), Res. Tech., Plant Path.	2735	847-4341
2605 Gardner, Box 7616; 8725 Fort Macon Ct., 27614		
Pardue, Dr. James E., Assoc. Prof. Emer., Text.		639-6109
Rt. 1, Box 397B, Angier 27501		
Parekh, Vibhuti K., Res. Tec., Biochem.	2581	782-5306
26 Polk, Box 7622; 7305 Glendower Rd., 27612		
Park, Dr. Hubert V., (Mary Alice), Prof. Emer., Math.	2381	787-5711
205 Harrelson, Box 8205; 3120 Darien Dr., 27607		
Park, Dr. Jae W., (Kyung), Res. Assoc., Food Sci.	2965	821-2275
236-E Schaub, Box 7624; 3824 Lexington Dr., 27606		
Park, Dr. Jae Y., (Sue), Prof., Physics	2512	787-5292
410C Cox, Box 8202; 1816 Manuel St., 27612		
Park, Dr. John C., (Loretta), Vis. Asst. Prof., Math. & Sci. Educ.	2238	481-3074
326 C Poe, Box 7801; 109 Karen Court, Cary 27511		
Parker, Dr. Beulah M., Assoc. Prof., Ent.	3341	828-5993
2715 Bostian, Box 7613; 2404 Wade Ave.		

Name, Title, Department and Address	Office Phone	Resid. Phone
Parker, Beverly A., (Merwyn K.), Res. Tech., Biochem. 339 Polk, Box 7622; 716 Coventry Ct., 27609	2581	782-5686
Parker, Brenda W., (Bobby), Acct. Clk., Phys. Sci. Res. 115 Cox, Box 8201; 2407 Trawick Rd., 27604	7141	872-1397
Parker, Dr. Charles A., Prof., Speech-Comm. 215A Winston, Box 8104; 4101 Huckleberry Dr., 27609	2450, 3204	787-2842
Parker, Doris B., Textbook Info. Ed., SSS SSS, Box 7224; 3912 Ingram Dr., 27604	3117	876-3410
Parker, Eugenia D., (Bill), Receipt., SVM 4700 Hillsborough St., Box 8401; 4512 Rockwood Dr., 27612	829-4200	787-5679
Parker, Forrest, (Addie Mae), Grounds Supv., Phys. Plant Sullivan Dr., Box 7219; Box 445, Durham 27703	3408	848-7755
Parker, Dr. George W., (Barbara), Assoc. Prof., Physics 213 Bureau of Mines, Box 8202; 4325 Lambeth Dr., 27609	7022	782-1099
Parker, Jack W., (Trudie), Sr. Ext. Area Swine Spec., Ani. Sci. P.O. Box 352, Edenton 27932; 210 Robin Ln., Edenton 27932	482-8431	482-4559
Parker, Dr. John M., III, Prof. Emer., Marine, Earth & Atmos. Sci. 3113 Darien Dr., 27607		787-6475
Parker, Laura C., (Dale), Sec., Speech-Comm. 206 Winston, Box 8104; 6587 Dwight Rowland Rd., Willow Springs 27592	3204	552-4790
Parker, Nancy Y., Libr. Asst., Circ. Library, Box 7111	3364	
Parker, Ruth W., (Stacy D.), Sec., Grad. Sch. 203 Peele, Box 7102; 1206 Kingston Ridge Rd., Cary 27511	7052	
Parker, Dr. S. Thomas, Assoc. Prof., Hist. 117 Harrelson, Box 8108; 6211 Lookout Loop	2484	848-1164
Parker, Sallie L., (Murray), Admn. Asst., Univ. Ext. 200 McKimmon, Box 7401; 4002 Buckingham Way, Apex 27502	2144	362-0024
Parkhurst, Dr. Carmen R., (Lynda), Prof., Poul. Sci. 112 Scott, Box 7608; Rt. 2, Box 84, Apex 27502	2628	362-4020
Parks, Dr. Leo W., (Nancy), Prof. & Head, Microb. 4515 Gardner, Box 7615; 1607 Kilarney Dr., Cary 27511	2391	481-2282
Parmley, Frederick A., Patrol Off., Public Safety Field House, Box 7220	2156	
Parnell, Grace S., (Malcolm C.), Clk.-Typ., Text. Engr. & Sci. 110 Nelson, Box 8301; 552 Weathergreen Dr., 27609	3481	848-7743
Parramore, Dr. Barbara M., Prof., Cur. & Instr. 300-C Poe, Box 7801; 5012 Tanglewood Dr., 27612	3221	787-2287
Parrish, Dwight R., (Janice), Agri'l. Res. Tech., Crop Sci. 3709 Hillsborough St., Box 8604; Rt. 2, Angier 27501	2827	897-5016
Parrish, Harvey S., Boiler Opr., Phys. Plant Heating Plant, Box 7219; 2430 Matthew's Rd., Clayton 27520	2184	934-8888
Parrish, Jerry L., Analyst Programmer, Admn. Comp. Serv. Leazar, Lower Level, Box 7209; Rt. 1, Box 1005, Moncure 27559	3541	542-2306
Parrish, Phyllis W., (Dwayne), Sec., Agri'l. Comm. 3 Polk, Box 7603; 63 Josephine Rd., Garner 27529	7055	934-3325
Parrish, Susan W., Acct. Clk., Accts. Pay. 213 Admn. Serv. Ctr., Box 7204; Rt. 1, Box 244, Angier 27501	2139	894-8617
Parron, Carol S., (Charles), Museum Curator, Ent. 4321 Gardner, Box 7613; 7021 Holly Springs Rd., 27606	2833	851-9751
Parry, Donald C., (Janice), Res. Analyst, Crop Sci. 840 Method Rd., Unit 3, Box 7629; 7700 Red Rock Dr., Apex 27502	3281	779-1229
Parsons, Carey H., (Jack), Sec., Crop Sci. 3709 Hillsborough St., Box 8604; 1322 Rand Dr., 27608	2827	787-4869
Parsons, Guy S., (Thelma), Prof. Emer., Ani. Sci. 405 Oakridge Rd., Cary 27511		467-9584
Parsons, James T., (Debbie), Res. Unit Mgr., Poul. Sci. Univ. Res. Farm 2, Box 7608; 4108 Lake Wheeler Rd., 27603	2740	828-7756
Partin, Laney R., (Faylene), Mail Clk., Phys. Plant Leazar, Box 7219; 2209 Biltmore Ct., 27610	3974	832-1314
Partin, Sylvia K., (Charley), Hskp., Stu. Aff. Univ. Stu. Ctr., Box 7306; 1707 Foxwood Dr., Garner 27529	3900	779-7416

Name, Title, Department and Address	Office Phone	Resid. Phone
Partington, Barbara, (James), Info. & Comm. Spec., Water Resou. Res. Inst.	2815	782-6107
225 Page, Box 7912; 3414 Lewis Farm Rd., 27607		
Paschal, Margaret A., Comp. Prog., Ani.Sci.	2761	556-2341
109 Polk, Box 7621; Rt. 1, Box 1171, Youngsville 27596		
Paschal, Dr. Mary, Prof., For. Lang.	2475	787-2691
116 1911 Bldg., Box 8106; 163 Pasquotank Dr., 27609		
Paschall, Michael R., (Maureen), External Oper. Supv., Trans.	3424	478-3093
Admn. Serv. Ctr., Box 7221; P.O. Box 246, Bunn 27508		
Pasour, Dr. Ernest C., Jr., (Adaline), Prof., Ec. & Bus.	2605	782-4931
6 Patterson, Box 8109; 4215 Galax Dr., 27612		
Patch, Dr. Charles E., (Linda), Asst. Prof., Phys. Educ.	2487	787-0607
2026 Carmichael, Box 8111; 1113 Bittersweet Ct., 27609		
Pate, Joseph D., (Leslie), Asst. Football Coach, Athl.	2612	
Weisiger-Brown Athl. Fac., Box 8502		
Patrick, Herbert W., (Lee), Elect. Tech., Chem.	2248	596-1692
17 Dabney, Box 8204; 427 Olive Branch Rd., Durham 27703		
Pattee, Dr. Harold E., (Phyllis), Prof., Bot., Food Sci.	3121	787-0425
278 Weaver, Box 7625; 6201 Winthrop Dr., 27612		
Patterson, Dr. David T., (Elizabeth), Adj. Prof., Crop Sci.	684-6523	383-7917
Duke Univ., Dept. of Bot., Durham 27706; 115 Brenrose Cir., Durham 27705		
Patterson, Dr. James W., (Hilda), Prof. Emer., Ani. Sci.		851-2439
624 S. Lakeside Dr., 27606		
Patterson, Josephine, (Matthew), Dist. Ext. Chm. Emer., Agril. Ext. Serv.		697-8848
1303 Youngs Mill Rd., Greensboro 27405		
Patterson, Dr. Robert P., (Janice), Prof., Crop Sci.	3267	851-0260
4124-B Williams, Box 7620; 802 Merwin Rd., 27606		
Patterson, Dr. Ruth M., Asst. Prof., Health Occup. Ed., Occup. Educ.	2234	833-6752
502-F Poe, Box 7801; 606-C Smedes Place, 27605		
Patterson, Sally M., Admn. Sec., SVM	829-4213	772-6241
4700 Hillsborough St., Box 8401; 2213 Regina Dr., 27603		
Patterson, Sue P., Lect., Graphic Comm., OED	2234	755-0525
510-K Poe, Box 7801; 708 N. Boylan Ave., 27605		
Patton, Rebecca L., Sec., McKimmon Ctr.	2277	851-3338
225 McKimmon, Box 7401; P.O. Box 37336, 27627		
Patty, Donald E., Asst. Registrar, Reg. & Rec.	3084, 2572	781-5007
100 Harris, Box 7313; 3000 Medlin Dr., 27607		
Patty, Dr. Richard (Dick) R., (Nell), Prof. & Head, Physics	2521	787-3167
105 Cox, Box 8202; 4304 Azalea Dr., 27612		
Patty, Tracy T., Acct. Tech., Budg. Off.	2175	781-5007
206 Holladay, Box 7206; 3000 Medlin Dr., 27607		
Paul, Karen L., (Victor), Sec., Engr.	3353	833-8640
117 Tompkins, Box 8105; 3030-15 Spanish Ct., 27607		
Paulos, Dr. John J., (Susan), Asst. Prof., Elec. & Comp. Engr.	2336	362-1120
422 Daniels, Box 7911; 10809 Bexhill Dr., 27606		
Paur, Dr. Sandra O., (Richard), Asst. Prof., Math.	3350	833-3718
236 Harrelson, Box 8205; 2502 Van Dyke Ave., 27607		
Pause, Dr. Michael, (Katherine), Prof., Design	2205	828-6132
305C Brooks, Box 7701; 124 Hillcrest Rd., 27605		
Pavlik, Philip M., Vis. Lect., Pol. Sci. & Pub. Admin.	2481	942-8065
211 Link Bldg., Box 8102; 104 Carr St., Chapel Hill 27514		
Pavlov, Igor, Sys. Analyst, Comp. Ctr.	2517	983-9240
1305 Library, Box 7109; 2250 Charles Dr., 381, 27612		
Pawlicki, Elizabeth A., Asst. Dir., Housing & Resid. Life	2406	787-6469
208 Harris, Box 7315; 4025 Deep Hollow Dr #222, 27612		
Payne, Dr. Gary A., (Rebecca), Assoc. Prof., Plant Path.	2735	851-2687
2605 Gardner, Box 7616; 4905 Dan David Dr., 27606		
Payne, Gay S., Admn. Sec., SVM	829-4230	481-1093
4700 Hillsborough St., Box 8401		
Payne, Rachel S., Laun. Wkr., Laun.	2122	832-0483
Laundry, Box 7218; 2528 Poole Rd.		
Peace, Dr. Robert L., Lect., Ec. & Bus.	3884	781-9489
211-E Hillsborough Bldg., Box 8110; 3316 White Oak Rd., 27609		

Name, Title, Department and Address	Office Phone	Resid. Phone
Peacock, Anderson, Floor Maint. Asst., Phys. Plant Park Shops, Box 7219; 2520 Old Garner Rd., 27610	3323	
Peacock, Gayle, G., (William, III), Clk.-Typ., Agri'l. Res. Serv. 100 Patterson, Box 7601; 1218 Wellington Ln., Cary 27511	2718	467-4850
Pearce, Annie L., Hskp. Asst., Phys. Plant Park Shops, Box 7219	3323	
Pearce, Charlie C., Jr., (Pat), Litho. Supv., Univ. Graphics Sullivan Dr., Box 7226; 115 Rogers Ln., 27610	2131	834-6132
Pearce, Dr. Douglas K., (Karyln Mitchell), Assoc. Prof., Ec. & Bus. 4C Patterson, Box 8109; 706 Ellynn Dr., Cary 27511	2605	467-2794
Pearce, J. Ron, Comp. Oper., Dairy Rec. Proc. Ctr. Leazar, Box 7623; Rt. 4, Box 212-A, Wake Forest 27587	7828	556-2928
Pearce, Joe L., Comp. Oper., SSS SSS, Box 7224; 4216 James Rd., 27604	2161	
Pearce, Roddy D., (Kelley), Painter, Phys. Plant Park Shops, Box 7219; 7120 Panther Branch Rd., Willow Springs 27592	3323	
Pearce, Welton L., Res. Tech., Ent. 840 Method Rd., Box 7628; Rt. 6, Box 288, Zebulon 27597	2765	269-9798
Pearsall, Patricia M., Recept., Human Resou. Admn. Serv. Ctr., Box 7210; 1812-G. Hillock Dr., 27612	2135	781-6570
Pearson, James R., (Lib), Univ. Dev. Off., Development 102 Page, Box 7901; Rt. 5, Box 360A, Apex 27502	7458	362-8900
Pearson, John, Jr., (Mildred), Hskp. Supv., Phys. Plant 13 Park Shops, Box 7219; 409 Colleton Rd., 27610	3323	755-0659
Pearson, Mildred M., (John), Res. Aide, Pesticide Residue Lab. 3709 Hillsborough St., Box 8604; 409 Colleton Rd., 27610	3391	755-0659
Pearson, Dr. Richard G., (Dr. Joan Robertson), Prof., Ind. Engr. 349 Riddick, Box 7906; 3305 Old Saybrook Ct., 27612	3086	787-4821
Pearson, Ronald G., (Peggy), Prof., Wood & Paper Sci. 1022K Biltmore, Box 8005; 1218 Canterbury Rd., 27608	3181	782-3990
Pease, Ann M., Sec., Development 12 Holladay, Box 7501; 4217-C Greencastle Ct., 27604	2846	878-0489
Peck, Jeanne, E., Analyst Programmer, Admn. Comp. Serv. B21 Hillsborough Bldg., Box 7209; 426 Hickory Dr., Chapel Hill 27514	2794	942-3071
Peck, Dr. John G., Assoc. Prof. Emer., Soc. & Anth. Box 8107; Rt. 1, Box 396A, Garner 27529		779-2963
Peebles, Edgar D., (Ruby), Lect., Ind. Engr. 110 Park Shops, Box 7906; 905 W. Peace St., 27605	2361	829-0148
Peebles, Paul E., (Mary), Stock Clk., Phys. Educ. 1217E Carmichael, Box 8111; 305 Parrish St., 27610	3508	829-9194
Peebles-Wilkins, Dr. Wilma C., (James A. Wilkins), Assoc. Prof., Soc. Wk. Prog., Soc. & Anth. 332 1911 Bldg., Box 8107; 2620 Cottage Circle, 27612	3291	847-9364
Peede, Michael A., Mech., Phys. Plant 18 Riddick Stad., Box 7219; P.O. Box 724, Coats 27521	3749	897-6042
Peedin, Dr. Gerald F., (Brenda), Crop Sci. Ext. Spec. & Assoc. Prof., Crop Sci., Crop Sci. Ext. 4216 Williams, Box 7620; Rt. 3, Box 601, Selma 27576	3331	965-9722
Peel, Hilton B., Jr., Engr. Res. Tech., Bio. & Agri'l. Engr. 135 Weaver, Box 7625; 334 Jones Franklin Rd., 27606	3101	851-6762
Peeler, Dr. R. James, (Shirley), Prof., Ec. & Bus. 203-A Patterson, Box 8109; 3513 Leonard St., 27607	3951	787-6036
Peet, Dr. Mary M., (Robert), Assoc. Prof., Hort. Sci. 220 Kilgore, Box 7609; 3315 Waterbury Dr., Durham 27707	3133	489-5673
Pegram, Fannie R., Hskp. Asst., Phys. Plant Park Shops, Box 7219; Rt. 1, Box 243, Apex 27502	3323	772-3712
Pegues, Rufus, Maint. Mech., Phys. Plant Armory Shop, Box 7219	3080	
Pence, David F., (Joan Humphreys), Res. Tech., Microb. 4602 Gardner, Box 7615; 89 Monitor Ct., Apex 27502	2393	779-1521
Pender, Eloise, Budg. Clk., Biochem. 126 Polk, Box 7622; 842 Athens Dr., 27606	2581	851-8232
Pender, Newell, Boiler Oper., Phys. Plant Heating Plant, Box 7219; Rt. 2, Box 829, Franklinton 27525	2184	556-2083

Name, Title, Department and Address	Office Phone	Resid. Phone
Pendergraft, Kathy E., Mgr., Univ. Temp. Serv., Human Resou. Admn. Serv. Ctr., Box 7210; 104 Milford Ct., Cary 27511	7060	469-8545
Pendergraft, Sherwood D., Stock Clk., Central Stores Sullivan Dr., Box 7225; 813 James St., Apex 27502	7238	362-4007
Pennell, Angela G., Sec., Dean's Off., Hum. & Soc. Sci., Coop. Educ. M-5 Link, Box 8101, 7110; Rt. 2, Box 391, Smithfield 27577	2199	934-3985
Pennell, Virginia B., (James), Budg. Clk., Health Serv. Clark Inf., Box 7304; 109 Dowell Dr., Cary 27511	2563	467-9221
Penny, Brenda T., Agri'l. Res. Tech., Crop Sci. 4401 Williams, Box 7620; Rt. 3, Box 422, 27603	3331	779-1271
Penny, Emma L., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 108 Smith Dr., Garner 27529	3323	779-4305
Penny, Frances P., Res. Tech., Poul. Sci. Dearstyne Avian Res. Ctr., Box 7608; Rt. 1, Box 176A, Coats 27521	2649	894-7198
Penny, Grace, Mgr., Phar., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 118 Lassiter Rd., Pittsboro 27312	829-4200	542-4532
Penny, Joseph F., (Irene), Food Serv. Asst., Univ. Dining Erdahl-Cloyd Annex, Box 7307; 712 W. Horne St., Clayton 27520	3270	553-6278
Penny, Louise C., (Samuel), Budg. Clk., SVM 4700 Hillsborough St., Box 8401	829-4200	
Penny, Sam L., Mgr., Parking Control, Trans. Admn. Serv. Ctr., Box 7221	3424	
Peoples, Timothy S., Engr. Res. Tech., Bio. & Agri'l. Engr. 123 Weaver, Box 7625; Rt. 4, 7901 River Ridge Rd., Wake Forest 27587	3101	266-4671
Peoples, Winifred H., (Brantley), Sec., Development 732 Poe, Box 7801; 1305 Brown Straw Dr., 27610	7017	828-6686
Perdue, Jennifer L., (Richard), Clk.-Typ., Micro., Path., & Parasit., SVM 4700 Hillsborough St., Box 8401; 101 Abbott Ln., Cary 27511	829-4200	481-1219
Perdue, Dr. Richard R., (Jennifer), Asst. Prof., Rec. Resou. Admin. 4008G Biltmore, Box 8004; 101 Abbott Ln., Cary 27511	3276	481-1219
Peretti, Dr. Steven W., (Linda), Asst. Prof., Chem. Engr. 315 Riddick, Box 7905; 4919 Fortunes Ridge Dr., Durham 27713	3572	
Perkins, Dr. John N., Prof., Mech. & Aero. Engr. 4207 Broughton, Box 7910; 1640 Village Glen Dr., 27612	2365	782-8950
Perkins, Lemward, Hskp. Asst., Phys. Plant Park Shops, Box 7219; 902 E. Gragg St., 27610	3323	821-3725
Pernell, W. Perry, (Catherine), Agri'l. Res. Tech., Crop Sci. Ext. 4210 Williams, Box 7620; 7520 Litchford Rd., 27609	3331, 3633	876-1440
Perrin, Dr. Richard K., (Pat), Prof., Ec. & Bus. 216 Patterson, Box 8109; 1000 Tyrell Rd., 27609	2607	781-2004
Perros, Dr. Harry G., (Helen), Assoc. Prof., Comp. Sci. 123-B Daniels, Box 8206; 102 Glen Bonnie Ln., Cary 27511	7930	467-7510
Perry, Astor, (Jessie), Prof. Emer., Crop Sci. 1201 Pineview Dr., 27606		851-4714
Perry, Bernestine, Bind. Wkr., Univ. Graphics. Sullivan Dr., Box 7226; 1621 Proctor Rd., 27610	2131	834-2048
Perry, Charlie E., (Thelma), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 407 Gill St., Zebulon 27597	3323	269-4546
Perry, Doretha W., (Jim), Hskp. Asst., Phys. Plant Park Shops, Box 7219; Rt. 1, Box 39, Spring Hope 27882	3323	478-3903
Perry, Frank N., Jr., (Mary Ruth), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 7001 Poole Rd., Lt. 121, 27610	3323	266-5394
Perry, Grace R., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 1509 E. Lane St., 27610	3323	834-3155
Perry, Jane G., (Jerry V.), Wordprocessor, Fin. Aid 211 Peele, Box 7302; 4320 Wedgewood Dr., 27604	2421	872-6437
Perry, Jasper, Jr., Hskp. Supv., Phys. Plant Park Shops, Box 7219	3323	
Perry, Dr. Jerome J., (Elizabeth), Prof., Microb. 4532B Gardner, Box 7615; 3125 Eton Rd., 27608	7814	782-0182
Perry, Dr. Jo E., Vis. Instr., Comp. Sci. 123-A Daniels, Box 8206; Rt. 9, Box 29, 27606	7970	834-8063

Name, Title, Department and Address	Office Phone	Resid. Phone
Perry, Dr. Katie B., (Steve), Assoc. Prof., Ext. Agri'l. Meteorologist, Hort. Sci.	3537	469-2270
123 Kilgore, Box 7609; 1226 Kilmory Dr., Cary 27511		
Perry, Philip E., (Barbara), Mech. Sys. Engr., Phys. Plant	2184	266-4351
12 Morris, Box 7219; Rt. 4, Box 284, Wake Forest 27587		
Perry, Dr. Stephanie T., (Joseph Wilkins, Jr.), Res. Assoc., Anat., Physiol. Sci. & Radiol., SVM	829-4344	782-2474
4700 Hillsborough St., Box 8401; 3323 Mill Run, 27612		
Perry, Dr. Thomas O., (Hazel), Prof., For.	2891	851-4218
2012 Biltmore, Box 8002; 5048 Avenet Ferry Rd., 27606		
Perry, Willard, Trades Helper, Phys. Plant	3323	
Box 7219		
Person, Gerard, Patrol Off., Public Safety	3206	
Field House, Box 7220		
Person, Lady A., Hskp. Asst., Phys. Plant	3323	494-7984
Park Shops, Box 7219; P.O. Box 171, Franklinton 27525		
Peters, E. Ann, Mgr., Sal. Admin., Human Resou.	7929	
Admn. Serv. Ctr., Box 7210		
Petersen, Dr. Keith S., (Jean), Assoc. Prof., Pol. Sci. & Pub. Admin.	2481	833-9405
202 Link Bldg., Box 8102; 2713 Bedford Ave., 27607		
Peterson, Althea G., (Stephen G., Jr.), Word Processor, Soc. & Anth.	3180	851-4825
301 1911 Bldg., Box 8107; 5100 Newcastle Rd., 27606		
Peterson, Brenda S., Sec., Ec. & Bus.	3886	
219 Hillsborough Bldg., Box 8110; 112 N. Chavis St., Franklinton 27525		
Peterson, Dr. Elmor L., (Miriam), Prof., Math. & Oper. Res.	2350	787-9083
325 Riddick, Box 7913; 3717 Williamsborough Ct., 27609		
Peterson, Karen R., Exec. Asst. to the Chan., Chan. Off.	3062	832-6785
A Holladay, Box 7001; 321 Oakwood Ave., 27601		
Peterson, Lue D., Hskp. Supv., Phys. Plant	3323	
Park Shops, Box 7219; 2050 Government Loop Rd., Clayton 27520		
Peterson, Dr. Richard E., (Clem), Assoc. Prof., Ind. Arts/Occup. Educ.	2234	782-6742
300-R Poe, Box 7801; 3700 Corbin St., 27612		
Peterson, Stephen F., HVAC Mech., Phys. Plant	829-4217	829-1992
4700 Hillsborough St., Box 8401; 2252 The Circle, 27608		
Peterson, Tim J., Laborer, Phys. Plant	3408	266-4860
Sullivan Dr., Box 7219; Rt. 1, Box 1062, Knightdale		
Peterson, Dr. Wilbur C., (Margaret), Assoc. Prof. Emer., Elect. & Comp. Engr.	2336	787-6567
405 Daniels, Box 7911; 1307 Dogwood Ln., 27607		
Petrea, Howard A., (Jean), Assoc. Prof., Math.	2382	829-9013
251 Harrelson, Box 8205; 20 Furches St., 27607		
Petters, Dr. Robert B., Asst. Dir., Music	2981	851-4261
209 Price Music Ctr., Box 7311; 608 1-A Charleston Rd., 27606		
Petters, Dr. Robert M., (Marcia), Assoc. Prof., Ani. Sci.	2768	362-5814
231 Polk, Box 7621; 108 Castle Bay Ct., Cary 27511		
Pettis, Bobby C., (Joyce), Dir., Minority Stud. Serv., Engr.	3264	
116 Page, Box 7904; 1108 Cedarhurst Dr., 27609		
Pettis, Dr. Joyce O., (Bobby), Asst. Prof., Engl.	3863	872-5224
212 Tompkins, Box 8105; 1108 Cedarhurst Dr., 27609		
Pettus, Ken R., (Jan), Asst. Football Coach, Athl.	2602	834-6320
Weisiger-Brown Athl. Fac., Box 8502; 1612 Scales St., 27608		
Pettyjohn, James D., Res. Analyst, Ani. Sci.	2766	832-8565
240 Polk, Box 7621; 1211 Brookside Dr., 27604		
Pfefferkorn, Kathryn F., Asst. Data Proc., Admn. Comp. Serv., Data Proc.	7208	362-7478
12 Peele, Box 7208; 206 E. Chatham St., Apex 27502		
Phares, Rev. Gail, Presbyterian Chapl., Coop. Campus Min.	834-5184	848-3936
27 Horne St.; 1105 Sapling Pl., 27609		
Pharr, Dr. David Mason, (Penny), Prof., Hort. Sci.	3166	782-4346
272 Kilgore, Box 7609; 2304 Tyson St., 27612		
Phelps, Susan H., (Henry), Sec., Agri'l. Comm.	3173	787-9264
312 Ricks, Box 7603; 3102 Childers St., 27612		
Philbeck, Robert B., (Sandra), Agri'l. Engr., Plant Path.	3575	851-0265
3908 Inwood Rd., Box 7632; Rt. 4, Box 752, 27606		

Name, Title, Department and Address	Office Phone	Resid. Phone
Philligin, Sandra S., (Bobby), Clk.-Typ., Plant Path. 1409 Gardner, Box 7616; 6113 Dogtrot Ct., 27604	2711	878-9250
Phillips, Ann E., (Paul), Ed./Librn., Ec. & Bus. 307 Hillsborough Bldg., Box 8110; 4813 Shady Ln., 27604	2885	872-7781
Phillips, Barbara L., (Bobby), Sec., Hum. Ext. M-5 Link Bldg., Box 8101; Rt. 3, 102 Kingston Rd., Knightdale 27545	3451	
Phillips, Carolyn C., Acct. Spec., Agri'l. Ext. Admin. 120 Patterson, Box 7601	3158	
Phillips, Daphne B., (George), Clk., Water Resou. Res. Inst. 225 Page, Box 7912; 1308 Vandora Ave., Garner 27529	2815	772-3168
Phillips, Dawn C., (Jake), Sec., Reg. & Rec. 100 Harris, Box 7313; Rt. 1, Box 157, Youngsville 27596	2576, 2577	556-6903
Phillips, Demetris, (Erma), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 3217 Brentwood Cir., 27610	3323	821-2313
Phillips, Donna C., (John), Budg. Clk., Chem. 206 Dabney, Box 8204; 5927 Westcreek Place, 27606	2548	851-7881
Phillips, Edward B., (Susan), Budg. & Fin. Mgr., Phys. Plant 209-F Morris, Box 7219; 200-A Persimmon Pl., Apex 27502	2180	362-9470
Phillips, Elizabeth L., (Timothy), Sec., Soil Sci. 3104 Williams, Box 7619; 1868 Spring Dr., Garner 27529	2838	
Phillips, Helen S., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 303 New Rand Rd., 27529	3323	772-0226
Phillips, Ida G., (George), Res. Asst., Crop Sci. 840 Method Rd., Unit 3, Box 7629; 1912 Smallwood Dr., 27605	3281	821-1929
Phillips, Jean, Sec., Civil Engr. 211 Mann, Box 7908; 24 Buck Jones Rd., 27606	2331	851-0339
Phillips, Dr. Joseph A., (Lou), Prof. & Asst. Dir., Agri'l. Ext. Serv. 211 Ricks, Box 7602; 3312 Edgemont Dr., 27612	3252	782-1127
Phillips, Joseph A., (Mary Alice), Agri'l. Res. Tech., Plant Path. Plant Path., USDA, 3127 Ligon St., Box 7631; Rt. 1, Box 169, Wendell 27591	2734	365-9142
Phillips, Judith H., (Alvin), Clk.-Typ., Dean's Office, Hum. & Soc. Sci. 106 Link, Box 8101; 2300 Avent Ferry Rd., Apt. G-6, 27606	2467	833-9337
Phillips, Dr. Lyle L., Prof. Emer., Crop Sci. 37 Sandfiddler, Emerald Isle 28557		354-3724
Philpot, Dr. Richard M., Adj. Prof., Tox. NIEHS, Res. Triangle Park; 5401 Sylvan Ln., 27612	541-3235	787-9155
Pickens, David B., (Kay), Comp. Oper. Mgr., Comp. Ctr. Hillsborough Bldg., Box 7109; Box 380, Rt. 3, Spring Hope, 27882	2518	478-4609
Pierce, Dr. Christine M., Assoc. Prof., Phil., Phil. & Rel. 104 Winston, Box 8103; 711 Broad Leaf Circle, 27612	3214	787-5085
Pietrafesa, Dr. Leonard J., (Marilyn), Prof., Mar., Earth & Atmos. Sci. 232 Withers, Box 8208; 4409 Pitt Dr., 27609	3721	787-6074
Pike, Lillian W., (Jimmie), Clk.-Steno, Nuc. Engr. 1110 Burlington, Box 7909; 1433 Chester Rd., 27608	2301	833-6538
Piland, John E., Dist. Ext. Chm. Emer., Agri'l. Ext. Serv. 3104 Darien Dr., 27607		787-6560
Pilkington, Dr. Dwain H., (Barbara), Ext. Asst. Prof., Food Sci. 129 Schaub, Box 7624; 109 E. Green Forest Dr., 27606	2956	851-1445
Pilkington, Melissa A., Vis. Lect., For. Lang. 118 1911 Bldg., Box 8106; 101 Overland Passage, Chapel Hill 27514	2475	967-7569
Pinder, Marie A., Clk.-Typ., Fin. Aid. 213 Peele, Box 7302; 4605 Kaplan Dr., 27606	2421	829-9092
Pinnix, Anita M., Clk.-Typ., Math 254 Harrelson, Box 8205; 6643-D Lake Hill Dr., 27609	2270	847-4673
Pipkin, Chester L., Pest Exterm., Phys. Plant Park Shops, Box 7219; Rt. 1, Box 4460, Willow Springs 27592	3323	639-4602
Pipkin, Leverne W., Mail Clk., Phys. Plant Leazar, Box 7219; 555 E. Edenton St., 27611	3974	832-9152
Pistole, Linda L., (David), Analyst/Programmer, Agri'l. Admin. 1 Patterson, Box 7601; 208 Irelan, 27606	7661	851-5754
Pitman, Barbara Cohea, (Ronnie), Agri'l. Res. Tech., Soil Sci. 1318 Williams, Box 7619; 1015 Harvey St., 27608	3967, 3285	839-2096
Pitman, Ronnie A., Librn., Col. Dev. & Acq. 3133 Library, Box 7111; 1015 Harvey, 27608	3187	

Name, Title, Department and Address	Office Phone	Resid. Phone
Pitt, William (Bill) P., (Jeanette), Elect., Phys. Plant Armory Shop, Box 7219; 1622 Dixie Trail, 27607	3080	783-8989
Pittman, Beryl C., (Ken), Lect., Engl. 203 Tompkins, Box 8105; 225 Woodburn Rd., 27605	3863	828-7776
Pittman, George T., (Lizzie), Mach. Oper., Phys. Plant Sullivan Dr., Box 7219; Rt. 2, Box 44G, Garner 27529	3408	772-0143
Pittman, Kenneth B., (Beryl), Learn. Resou. Spec., Design 203 Brooks, Box 7701; 225 Woodburn Rd., 27605	2202	828-7776
Pittman, Margaret C., (Melson), Sec., Hort. Sci. 116 Kilgore, Box 7609; 805 Ravenwood Dr., 27606	3189	851-4071
Pittman, V. Jean, Sec., Soc. & Anth. 305 1911 Bldg., Box 8107; Rt. 10, Box 275-2, 27603	3114	779-6691
Pitts, Dr. M. Henry, (Helen), Assoc. Prof. Emer., Psy. 626 Poe, Box 7801; 5217 Russett Rd., Rockville, MD 20853	301-871-5659	
Pizer, Dr. Morton E., (JoAnn), Phys., Health Serv. Clark Inf., Box 7304; 601 Lakestone Dr., 27609	2564	787-1027
Place, Wayne, (Jaine), Assoc. Prof., Arch. 305A Brooks, Box 7701; 5213 Penny Rd., 27606	2203	839-2368
Plant, Sheri L., Res. Tech., Gen. 3632 Gardner, Box 7614; 149 Jones Franklin Rd., Apt. G, 27606	2294	859-1623
Pleasants, Margie L., (Al), Data Control Clk., Dairy Rec. Proc. Ctr. Leazar, Box 7623; Rt. 1, Box 38, Apex, 27502	2074	779-0476
Plemmons, Dr. Robert J., (Mary Jo), Prof., Math. & Comp. Sci. 305 Harrelson, Box 8205; 3704 Oak Park Rd., 27612	3796	782-5607
Plummer, James G., (Brenda), Stock Clk., Univ. Dining Dining Hall, Box 7307; 1201 Armstrong, 27610	3964	828-9758
Plummer, Linda V., Clk.-Typ., Admis. 107 Peele, Box 7103; P.O. Box 11035, 27604	2433	
Plummer, Ronald J., Ext. Educ. & Train. Spec., UNC Ctr. for Pub. TV 218 TV Ctr., Box 8601	3604, 3607	
Poindexter, Dr. J. C., Jr., Assoc. Prof., Ec. & Bus. 209C Patterson, Box 8109; 1410 Lake Dam Rd., 27606	2256	851-4353
Poland, Dr. George W., Prof. Emer., For. Lang. & Lit. 1911 Bldg.; 3929 Arrow Dr., 27612	2475	787-4771
Poling, Dr. E. Barclay, (Lindy), Assoc. Prof., Hort. Sci. Ext. 264 Kilgore, Box 7609; 456 Peebles Creek Dr., Cary 27511	3283, 3284	467-2531
Polk, Nancy E., Asst. Dir. Summer Sessions & Con. Educ. Spec., Lifelong Educ. 145 McKimmon, Box 7401; 211 Barbary Ct., Cary 27511	2265	
Pollard, Dr. Carol W., Asst. Prof., Engl. 103 Tompkins, Box 8105; 2611 Grant Ave., 27608	3854	781-4963
Pollard, D. Wayne, Agri'l. Res. Tech., Plant Path. 2506 Gardner, Box 7616; Rt. 1, Box 404, Apex 27502	2735	779-1542
Pollard, Donnie K., HVAC Mech., Phys. Plant Armory, Box 7219; Rt. 1, Box 89AB, Coats 27521	3080	
Pollard, Joyce C., (Jimmy), Admn. Sec., Mech. & Aero. Engr. 3211 Broughton, Box 7910; 7870 Barbour Store Rd., Willow Springs 27592	2365	639-6704
Pollock, Briget H., Interior Designer, Purch. & Stores 220 Alumni, Box 7212	2171	
Pollock, Dr. Kenneth H., Assoc. Prof., Stat., Biomath. & Zool. 614-G Cox, Box 8203; 405 Perry St., 27608	2533	821-1647
Pollock, Dr. Mary Ann S., Spec., Foods & Nutr., Agri'l. Ext. Ser. Box 7605; 10915 Bridle Lane, 27614	2770	848-8220
Pollock, Nancy G., Thesis Ed., Grad. Off. 115 Peele, Box 7102; 2305 Lyon St., 27608	2871	
Pomeranz, James B., (Nancy), Promotions/Publs., Wolfpack Club Case Athl. Ctr., Box 8501; 102 Castle Bay Ct., Cary 27511	2102	362-4108
Pond, Dr. Kevin R., (Janice), Asst. Prof., Ani. Sci. 220-C Polk, Box 7621; Rt. 2, Box 56B, Apex 27502	2763	362-4592
Pond, Miriam, (Kenneth), Clk.-Typ., Hist. 162 Harrelson, Box 8108; 1213 Granada Dr., 27612	3383	787-3105
Pond, Dr. Samuel B., III, (Susan), Asst. Prof., Psy. 710 Poe, Box 7801; 1011 Castalia Dr., Cary 27511	2251	469-2963

Name, Title, Department and Address	Office Phone	Resid. Phone
Pond, Susan B., (Samuel B.), Lect., Engl. G-131 Tompkins, Box 8105; 1011 Castalia Dr., Cary 27511	3854	469-2963
Poole, Dianne L., Sec., Soil Sci. 3403 Williams, Box 7619; 602 Leonard Dr., Knightdale 27545	3285	266-2882
Poole, Henry H., (Mae), Acct. Clk., Univ. Stu. Ctr. 3102 Univ. Stu. Ctr., Box 7306; 5652 Thea Ln., 27606	2558	851-5061
Poole, Joyce L., Comp. Programmer, Stat. 608-B Cox, Box 8203; 1420 Park Dr., 27605	2534	832-6703
Poole, Mae P., (Henry), Clk.-Typ., Lifelong Educ. 145 McKimmon, Box 7401; 5652 Thea Dr., 27606	2265	851-5061
Poole, Michael B., Elect., Coliseum 116 Reynolds Coliseum, Box 8501; Rt. 2, Box 286, 27610	2108	779-1149
Poole, Nancy R., (Glenn W.), Data Entry Oper., Dairy Rec. Proc. Ctr. Leazar, Box 7623; 200 Wellington Dr., Knightdale 27545	2075	266-1389
Poole, Van P., (Alberta), Engr. Res. Tech., Plant Path. 3908 Inwood Rd., Box 7632; 4301 Whitfield Rd., 27610	3575	779-3514
Pope, Dr. Daniel T., Prof. Emer., Hort. Sci. Box 5216; Box 126, Edisto Island, S.C. 29438	803-869-2757	
Pope, Jesse, W. Jr., Hskp. Admn., Phys. Plant 5 Park Shops, Box 7219; 2724 Sanderford Rd., 27610	3323	832-6052
Pope, L. Ray, (Jan), Agri'l. Res. Tech., Plant Path. 3407 Gardner, Box 7616; Rt. 3, 211 Whitfield St., Knightdale 27545	2752	266-3187
Pope, Lillie F., Asst. Supv., Univ. Dining Erdahl-Cloyd Annex, Box 7307; 808 E. Davie St., 27601	3270	
Pope, Vickie B., Supv., Univ. Dining Erdahl-Cloyd Annex, Box 7307; Rt. 1, Box 264-B, Coats 27521	3270	
Porter, David, (Phyllis M.), Agri'l. Res. Tech., Plant Path. 3709 Hillsborough St., Box 8604; Rt. 3, Box 450 H, 27603	2828	772-9667
Porter, Jean M., Head Docu. Librn., Docu., Libr. 2126 Library, Box 7111; 612 Dixie Tr., 27607	3280	832-2221
Porter, Joseph A., Jr., (Mary Beth), Prof. Emer., Text. Mgmt. & Tech. 306E Nelson, Box 8301; 1225 Brooks Ave., 27607	3761	787-6967
Porter, Dr. Richard L., Asst. Prof., Mat. Engr. 1 Riddick Annex, Box 7907; 1605 Sherburg Ct., 27606	2347	851-5879
Porter, Ruth F., (Herman), Sec., Dean's Off., Sch. of Educ. 208 Poe, Box 7801; 1313 Sycamore Dr., Garner 27529	2231	772-3181
Porterfield, Dr. Ira D., (Lorraine), Prof. Emer., Ani. Sci. 2624 Fines Creek Dr., Statesville 28677	704-873-3527	
Postelthwait, Dr. Robert W., Adj. Prof., Text. Engr. & Sci. VA Hosp., 5008 Fulton St., Durham 27705		286-0411
Posthill, Dr. John B., Res. Assoc., Analytical Instrumentation Facility, Mat. Engr. Microelectronics Ctr. of N.C., Box 7907; 103-2H Kempwood Dr., Cary 27511	248-1918	469-3985
Potterton, Marjorie M., (David), Asst. Dir., Fin. Aid. 213 Peele, Box 7302; 910 Constitution Dr., Apt. 503, Durham 27705	2421	383-9182
Poulton, Dr. Bruce R., (Betty), Chancellor & Prof., Ani. Sci. A Holladay, Box 7001; 1903 Hillsborough St., 27607	2191	
Pounds, Jerry W., Sys. Acct., Admn. Comp. Serv. 1212 Blue Ridge Rd., Box 7227; 202 Fox Hollow Dr., Clayton 27520	3640	553-6935
Powe, Madelon D., Acct. Clk., Acct. Pay. 213 Admn. Ser. Ctr., Box 7204; 1321 Hazelnut Dr., 27610	2139	834-7251
Powell, Anita D., Sec., Crop Sci. Ext. Mt. Res. Sta., 516 Test Farm Rd., Waynesville 28786 209 Little Mountain Rd., Waynesville 28786	704-452-5608	704-456-3731
Powell, Cathy B., (Ronnie), Clk. Supv., Acqs., Libr. 3136 A Library, Box 7111; 106 Kenneth Ridge Ct., Apex 27502	3833	362-5243
Powell, Dr. Dillard, (Anita), Adj. Assoc. Prof., Text. Mgmt. & Tech. 530 E. Cornwall Rd., Cary 27511		467-8906
Powell, Eugene E., (Gail), Agri'l. Res. Tech., Ent. 3314 Gardner, Box 7313; 6508 Bakersfield Dr., 27606	2697	859-0200
Powell, Evelyn S., (Leon), Libr. Tech. Asst., Monographic Cat. 1121 Library, Box 7111; Rt. 4, Box 3005, Lassiter Rd., Apex 27502	2603	362-7780
Powell, G. Carlos, (Louise), Asst. Prod. Mgr., Univ. Graphics Sullivan Dr., Box 7226; Rt. 1, Box 95, Wake Forest 27587	2131	556-3450

Name, Title, Department and Address	Office Phone	Resid. Phone
Powell, M. (Kim) A., (Rori), Prof., Lands. Arch., Hort. Sci. 170 Kilgore, Box 7609; 1021 Sturdivant Dr., Cary 27511	3322	467-7713
Powell, Dr. Nathaniel T., (Alice), Prof. & Ext. Spec., Plant Path. NCSU Annex, 3709 Hillsborough St., 27607, Box 8604; 114 Merwin Rd., 27606	2828	851-2591
Powell, Reggi J., (Joey), Sec., Rec. Resou. Admin. 4008 Biltmore, Box 8004; 5704 Rail Fence Rd., 27606	3276	851-6895
Powell, Dr. Roger A., (Consie), Assoc. Prof., Zool. & For. 2107 Gardner, Box 7617; 5208 Olive Rd., 27606	2741	851-1320
Pozo, Frank J., Librn., Refr. 1140 Library, Box 7111; 714 Virginia Ave., 27604	2935	834-7600
Prado, Jacqueline C., Clk.-Typ., Career Plan. & Place. 28 Dabney, Box 7303	2396	
Prak, Dr. Anco L., Ryan Prof., Ind. Engr., Furn. Mfg. & Mgmt. 341 Riddick, Box 7906; P.O. Box 5422, 27650	3335	781-6099
Preddy, Jo A., Acct. Clk., Fin. & Bus. 2 Peele, Box 7213; Lot 59, Rt. 1, Valley Woods, Knightdale 27545	2986	
Prekler, George E., (Margaret), Boiler Oper. Shift Supv., Phys. Plant Heating Plant, Box 7219; Rt. 2, Box 248, Apex 27502	2184	362-7685
Premakumar, Dr. Ramaswamy, (Nirmala), Res. Biochemist/USDA, Microb. 4627 Gardner, Box 6615; 107 Radcliff Cir., Durham 27713	3905	544-5347
Prendergast-Grimes, Anne Marie, Lect., Engl. 203 Tompkins, Box 8105; 425 N. Bloodworth St., Apt. A, 27604	3863	833-5874
Pressley, James V. Jr., (Aileen B.), Assoc. Dir., Craft Ctr. Univ. Stu. Ctr. Lower Level, Thompson Bldg., Box 7305; 421 Page St., Cary 27511	2457	467-3396
Preston, Dr. Richard J., Prof. & Dean Emer., For. Resou. 2028 Biltmore, Box 8001; 3621-E Ancloste Pl., 27607	2883	782-8276
Prevette, Mara T., Phototypesetter, Print Shop, Con. Educ. & Professional Dev. 136 McKimmon, Box 7401; Rt. 15, Box 484, 27612	3692	847-6025
Price, Charlotte L., Clk.-Typ., Soil Sci. 3230 Williams, Box 7619; 4125 Camelot Dr., 27609	2636	781-9162
Price, Hope, Acct. Tech., Contr. & Grants Leazar, Lower Level, Box 7214	2153	
Price, Lisa P., (Donavan), Admn. Sec., Anat., Physiol. Sci. & Radiol. SVM 4700 Hillsborough St., Box 8401	829-4220	
Price, Peggy M., (Jackie), Sec., Res. Admn. 1 Holladay, Box 7003; 505 Sunnybrook Rd., 27610	7199	832-5418
Price, Richard E., (Lee), Sec., For. 2022 Biltmore, Box 8002; 3946-A Tara Dr., 27609	2891	
Price, Dr. Sylvester G., III, Resid. Sm. Ani. Int. Med., SVM 4700 Hillsborough St., Box 8401	829-4200	
Prichard, Virginia M., Assoc. Prof., For. Lang. 304 Harrelson, Box 8106; 2831½ Mayview Rd., 27607	3297	833-5888
Pridgen, Jerome, Gen. Utility Wkr., Phys. Plant Sullivan Dr., Box 7219; Rt. 3, Box 233, Spring Hope 27882	3408	478-5464
Priest, Joseph A., (Kathy), Agri'l. Res. Tech., U.S.D.A., Bot. 4212 Gardner, Box 7612; 2816 Fowler Ave., 27607	2726	834-3279
Prince, Harold L., Farm Supv., Univ. Res. Unit 2 3720 Lake Wheeler Rd., Box 7601; 2515 Piney Plains Rd., 27606	2759	851-0832
Prioli, Dr. Carmine A., (Elizabeth), Assoc. Prof., Engl. 226 Tompkins, Box 8105; 107 Stoneycreek, Chapel Hill 27514	3870	732-8650
Pritchard, Dr. Ruie J., Asst. Prof., Curr. & Inst. 408-B Poe, Box 7801; 3734 Jamestown Cir., 27609	3221	781-9616
Privette, Iva G., Libr. Tech. Asst., Vet. Med. Libr., SVM 4700 Hillsborough St., Box 8401; 632 Cumberland St., 27610	829-4218	832-9157
Privette, Leslie R., (Kathleen), Res. Tech., Crop Sci. 2415 Williams, Box 7620; 6001 Spring Valley Dr., 27604	2246	876-1575
Privette, Milton D., Plumber, Phys. Plant Armory Shop, Box 7219; 13 W. Lee St., 27601	3080	829-5532
Probst, Diane M., (Michael), Art.-Illus., Agri'l. Comm. Ricks Hall Annex, Box 7603; 7740 Crown Crest Ct., 27609	2861	848-4125

Name, Title, Department and Address	Office Phone	Resid. Phone
Proctor, Dr. Charles H., Prof., Stat. ....2531 612-E Cox, Box 8203; 4325-1 Avent Ferry Rd., 27606	2531	851-8854
Proctor, Dr. Dalton R., (Ruby), Asst. Dir., Ext. State 4-H Ldr., Prof. ....2801 201 Ricks, Box 7606; 1023 Sturdivant Dr., Cary 27511	2801	467-7511
Proctor, Deborah A., Acct. Clk., Vet. Teach. Hosp., SVM .....829-4200 4700 Hillsborough St., Box 8401; Rt. 5, Box 16, Apex 27502	829-4200	362-7472
Proctor, Margaret C., Supv., Acct., Vet. Teach. Hosp., SVM .....829-4200 4700 Hillsborough St., Box 8401; Rt. 2, Box 124-3, Apex 27502	829-4200	
Prosise, Dr. Everette M., (Phyllis), District Prog. Ldr., Agri'l. Ext. Serv. ....2380 300 Ricks, Box 7602; 2809 Campbell Rd., 27606	2380	851-8680
Prygrocki, Gregory N., (Alison), Assoc. Prof., Prod. & Vis. Design .....2203 316-C Brooks, Box 7701; 903 W. Johnson St., 27605	2203	834-6560
Pryse, Nelda B., (Randy), Staff Dev. Tech., Admn. Comp. Serv. ....2794 B 21 Hillsborough Bldg., Box 7209; 2301 Cole Rd., Clayton 27520	2794	
Ptacek, Donna J., Sec., Ec. & Bus. ....2472 308 Hillsborough Bldg., Box 8110	2472	
Pugh, Dr. Charles R., (Ruth), Prof. Emer., Ec. & Bus. 4405 Boxwood Rd., 27612		787-6635
Pugh, Dorothy E., Comp. Programmer, Ec. ....3041 317-B Hillsborough Bldg., Box 8110; 3119 Leonard St., 27607	3041	787-6580
Pullen, Mable D., Hskp. Asst., Phys. Plant .....3323 Park Shops, Box 7219; 2 Maple St., 27610	3323	839-8438
Pulley, Angie L., Data Entry Oper., Dairy Rec. Proc. Ctr. ....2075 Leazar, Box 7623; 502 W. Judd St., Zebulon 27597	2075	269-4593
Pulley, Clarence, Hskp. Asst., Phys. Plant .....3323 Park Shops, Box 7219	3323	
Pulley, Oscar L., (Pamela), Lab. Ani. Tech., Vet. Teach. Hosp., SVM ....829-4200 4700 Hillsborough St., Box 8401; Rt. 1, Box 39-C, Holly Springs 27540	829-4200	552-6237
Pulley, Pearl, Hskp. Asst., Phys. Plant .....3323 Park Shops, Box 7219	3323	
Pulley, Roosevelt, Hskp. Asst., Phys. Plant .....3323 Park Shops, Box 7219; 112 Hill St., 27610	3323	833-4938
Pulliam, Earl N., Dir., Contr. & Grants .....2153 Leazar, Lower Level, Box 7214; 2216 Shenandoah Dr., 27606	2153	872-2952
Pullman, Elizabeth P., (James), Res. Tech., Poul. Sci. ....2623 108 Scott, Box 7608; T-27, 1304 Seaton Rd., Durham 27713	2623	544-1609
Pully, Gladys D., Hskp. Asst., Phys. Plant .....3323 Park Shops, Box 7219	3323	
Purcell, Albert E., (Mary), Res. Assoc. Emer., Food Sci. ....801-378-6677 Brigham Young Univ.; 43W 1070N Orem, UT, 84057	801-378-6677	801-224-5461
Purcell, Robert L., (Lori), Recruiting Coord., Athl. ....2663 Weisiger-Brown Athl. Fac., Box 8502; 1001-A6 Avent Hill, 27606	2663	859-2345
Purcell, Rev. Ted, Baptist Chapl., Coop. Campus Min. ....834-1875 Bapt. Stu. Ctr., P.O. Box 5608, 27650; 1201 Brookside Dr., 27604	834-1875	832-2483
Purkayastha, Siddhartha, (Sujatha), Res. Engr., Food Sci. ....2959 119 Schaub, Box 7624; 2413-H Wesvill Ct., 27607	2959	783-5302
Purmul, Mohammed A., (Zarmina), Acct. Clk., Housing & Resid. Life ....2410 207 Harris, Box 7315; 506 Lipscomb Ct., 27609	2410	787-1393
Purrington, Dr. Suzanne T., (Alfred), Assoc. Prof., Chem. ....2864 422 Dabney, Box 8204; 6108 Lost Valley Rd., 27612	2864	787-8591
Purser, Carole S., (William "Bill"), Sec., UNC Sea Grant .....2454 105 1911 Bldg., Box 8605; Rt. 4, Box 394, 27606	2454	362-6045
Pursley, Walter A., (Karen), Res. Asst., Bot., Air Quality Res. ....3575 1509 Varsity Dr., Box 7632; 1223 Carlton Ave., 27606	3575	833-1570
Purvis, Edith H., Mdse. & Mktg. Asst., SSS .....2161 SSS, Box 7224; 5824 Shawood Dr., 27609	2161	847-5000
Puryear, Bobby L., Coord. of Advising, Ec. & Bus. ....3273 202 Patterson, Box 8109; 1105 Villa Green Ct., 27612	3273	847-7527
Puryear, Elizabeth R., (Harvey), Asst. to SSS Dir., SSS .....2161 SSS, Box 7224; 313 Compton Rd., 27609	2161	787-0381
Puryear, Pamela E., Dir., Tob. Lit. Serv. ....2836 2314 Library, Box 7111; 817½ Rosemont Ave., 27605	2836	828-7438
Puteha, Dr. Mohan S., Prof., Math. ....7919 356 Harrelson, Box 8205; 1604 Glen Eden Dr., 27612	7919	782-1017

Name, Title, Department and Address	Office Phone	Resid. Phone
Putnam, Zeph J., (Renee), Dir., Univ. Dining Dining Hall, Box 7307; 230 Winston Dr., Cary 27511	3963	469-0057
Pyrzak, Dr. Roman, (Rina), Res. Asst., Poul. Sci. 108 Scott, Box 7608; 10210F Hunting Ridge Rd., 27609	2623	847-8710

Q

Quakenbush, Cristie F., Food Serv. Asst., Univ. Dining Dining Hall, Box 7307	3963	
Quay, Dr. Thomas L., Prof. Emer., Zool. 2720 Vanderbilt Ave., 27607		828-9874
Quesenberry, Dr. Charles P., (Odell), Prof., Stat. 614-B Cox, Box 8203; 224 Northbrook Dr., 27609	2532	787-7918
Quick, Suzanne S., (Reni), Sec., Gen. 2625 Gardner, Box 7614; 620 Applecross Dr., Cary 27511	2289	469-8464

R

Rabb, Kenneth D., (Nola), Assoc. Dean Emer., Stu. Aff. 309 Loop Rd., Garner 27529		772-0211
Rabb, Dr. Robert L., (Mabel), WNR Prof. Emer., Ent. Unit 1, 840 Method Rd., Box 7628; 1821 Pictou Rd., 27606	2638	851-6835
Rabb, Yusufah D., Sec., Agri'l. Ext. Serv. 302 Ricks, Box 7602; 3301-203 Quail Hollow Dr., 27609	2380	872-5208
Rackley, Cathy B., (Bill), Admn. Asst., Alumni Rel. Alumni, Box 7503; Rt. 10, Box 89, 27603	3375	772-5962
Radcliff, Beverly K., Patrol Off., Public Safety Field House, Box 7220	3206	
Radtke, Rosetta R., Lect., Engl. 281 Tompkins, Box 8105; 2208 Hope St., 27607	3863	833-9086
Rafferty, Ann M., Elect. Apprentice, Phys. Plant Armory Shop, Box 7219; 1217 North King Charles Rd., 27610	3080	832-9949
Ragland, Eloise R., (J. Ike), Sec., Text. Engr. & Sci. 103 Nelson, Box 8301; 1909 Manuel St., 27612	3253	782-0267
Rahman, Dr. Mohammed S., (Nazeer), Assoc. Prof., Civil Engr. 201-B Mann, Box 7908; 6209 Bramblewood Dr., 27612	2331	847-8151
Rajala, Dr. Sarah A., (Jim Aanstoos), Assoc. Prof., Elec. & Comp. Engr. 307 Daniels, Box 7911; 311 Homestead Dr., Cary 27511	2336	851-6899
Rakes, Dr. Allen H., (Alma S.), Prof., Ani. Sci. 245-B Polk, Box 7621; 4204 Galax Dr., 27612	2766	787-2746
Rall, Julie L., Vet. Tech., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 4029 220 Deep Hollow Dr., 27612	829-4200	781-2428
Raman, Dr. Sethu, (Mohana), Prof., Mar., Earth & Atmos. Sci. 428 Withers, Box 8208; 1108 Red Leaf Ct., 27609	7144	878-4659
Ramsay, Dr. Robert T., Asst. Prof., Math. 318 Harrelson, Box 8205; 2465 Stevens Rd., 27610	3100	833-3188
Ramsey, Bess H., Sales Mgr., Univ. Stu. Ctr. Games Room, Univ. Stu. Ctr., Box 7306; 2520 Garner Rd., Lot 51, 27610	3112	832-6150
Ramsey, Donna R., Trade Book Buyer, SSS SSS, Box 7224; Rt. 1, Box 401, 27614	3117	848-4130
Ramsey, Dr. Harold A., Prof., Ani. Sci. 303 Polk, Box 7621; 610 Ralph Dr., Cary 27511	2766	467-9401
Ramsey, Sharon R., Tech., Food Sci. 236 Schaub, Box 7624; 4213 Avent Ferry Rd., 27606	2965	859-1053
Rand, Daylon, Floor Maint. Supv., Phys. Plant Park Shops, Box 7219; 1005 E. Martin St., 27601	3323	828-2695
Rand, J. Patrick, Assoc. Prof., Arch. 206 Brooks Add., Box 7701; 225 Furches St., 27607	3051	833-9555
Rand, Marion S., (Ken), Clk., Mat. Engr. 2149 Burlington, Box 7916; 911 Canterbury Rd., 27607	2933	833-7676

Name, Title, Department and Address	Office Phone	Resid. Phone
Ransdell, Jackie B., (Robert L.), Sec., Soc. & Anth. 233 1911 Bldg., Box 8107; 419 Pleasants Ave., Cary 27511	2491	467-6547
Ransom, Cindy G., (Steve), Sec., Trades Serv., Phys. Plant 1 Park Shops, Box 7219; 4900-D Pebble Beach Dr., 27604	3323	850-9650
Ransom, Mark R., Graphic Designer, Engr. Publ., Engr. 9 Page, Box 7901; 111½ Chamberlain St., 27606	2310	834-1698
Raper, Dr. Charles D. Jr., (Ellen), Prof., Soil Sci. 4302B Williams, Box 7619; 1718 Trinity Rd., 27607	2644	851-9325
Raper, Richard E., Mech. Supv. Riddick Stad., Box 7219; 8714 Old Stage Rd., 27613	3749	779-2291
Rascoe, Pennie, Acct. Clk., Capital Assets Acct. 213 Admn. Serv. Ctr., Box 7205; P.O. Box 593, 27545	2148	266-5760
Rasdorf, Dr. William J., (Gail), Asst. Prof., Civil Engr. & Comp. Sci. 326 Mann, Box 7908; 1311 Dylan Heath Ct., 27608	2331	834-2535
Rastgoufard, Dr. Parvis, (Hilda), Vis. Asst. Prof., Elec. & Comp. Engr. 419 Daniels, Box 7911; 1269 Teakwood, 27606	2336	851-9074
Ratcliff, Pamela S., (Clarence), Data Entry Oper., Dairy Rec. Proc. Ctr. 123 Leazar, Box 7623; 2908 Buckthorne Ct., 27610	2075	839-2360
Ratcliff, Shirlyn A., Sec., Development 12 Holladay, Box 7501; 3226 Starmount Dr., 27604	2846	876-8473
Ratliff, Charlene A., (Joseph), Receipt., Mech. & Aero. Engr. 3211 Broughton, Box 7910; 3707 Cason St., Garner 27529	2365	779-4113
Raulston, Dr. J. C., Prof., Hort. Sci. 150 Kilgore, Box 7609; 614 Gardner St., 27607	3132	833-9638
Rawlings, Dr. John O., (Janie), Prof., Stat. & 604-F Cox, Box 8203; 6417 Chapman Ct., 27612	2535	782-5301
Rawls, Dr. Horace D., Prof. Emer., Soc. & Anth. Box 8107; 2306 Anderson Dr., 27608		782-0238
Rawls, Dr. Rachel F., (Horace), Assoc. Prof. Emer., Psy. 640-C Poe, Box 7801; 2306 Anderson Dr., 27608	2251	782-0238
Ray, Ernest L., Cook, Univ. Dining Univ. Stu. Ctr., Box 7307; 608 Dogwood, Fuquay-Varina 27526	2021	552-4501
Ray, Jean D., (Douglas T.), Acct. Tech., Budg. Off. 207 Holladay, Box 7206; 5101 Castlebrook Dr., 27604	2175	872-7928
Ray, Junius E., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 203 Smith St.	3323	553-7790
Ray, Michael L., Lab. Ani. Tech., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 525 Rose Ln., 27602	829-4200	755-0054
Ray, Sharon R., Unit Mgr., Ani. Sci. Univ. Res. Unit 1, Trenton Rd., Box 7621; 812 Barbara Dr., 27606	851-1803	851-9235
Ray, Varah F., Food Serv. Asst., Univ. Dining Dining Hall, Box 7307; 608 Dogwood St., Fuquay 27526	3963	552-4501
Ray, W. Turner, (Patty), Mdse. EDP Sys. Supv., Mdse. Div., Book Dept. SSS, Box 7224; Rt. 3, Box 301 F, Wake Forest 27587	3117	556-5382
Rayfield, Jemma S., (Gene), Dir., Admn. Serv., Engr. 101 Page, Box 7901; 7425 Grist Mill Rd., 27609	2310	847-1046
Rayle, Sally H., (W.E. "Ray"), Sec., Hort. Sci. Ext. 162 Kilgore, Box 7609; 3924 Vesta Dr., 27603	3321	772-4154
Raymond, Dana G., (Debra), Asst. Prof., Design 201-E Leazar, Box 7701; 38 Daisy St., 27607	3260	755-0187
Raymond, Debra K., (David), Med. Lab. Tech., Vet. Equine Res. Ctr. P.O. Drawer 211, Southern Pines 28387; Rt. 3, Box 412, Carthage 28327	692-8773	947-3474
Rayno, Donald R., (Cynthia), Radiochemist, Nuc. Engr. B109 Burlington, Box 7909; 1403 Sutherland Rd., Cary 27511	2496	362-6764
Raynor, Charles E., Lect., Phys. Educ. 2046 Carmichael, Box 8111; P.O. Box 117, Micro 27555	2487, 2488	284-2230
Rea, Dr. Phillip S., (Karen), Assoc. Prof., Rec. Resou. Admin. 4008E Biltmore, Box 8004; 3328 Thomas Rd., 27607	3276	781-0481
Reade, Bessie L., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 2520 Garner Rd., 214, 27601	3323	821-7481
Real, Dr. Leslie A., Assoc. Prof., Zool. 3216 Gardner, Box 7617; 101 Loch Bend Lane, Cary 27511	2741	859-0188
Reams, Hallie B., (Davis), Clk., Hort. Sci. 122 Kilgore, Box 7609; 501 Spring Ave., Fuquay-Varina 27526	3668	552-4513

Name, Title, Department and Address	Office Phone	Resid. Phone
Redeker, Immo H., (Kathleen), Dir., Min. Res. Lab. 180 Coxe Ave., Asheville 28801		704-251-6155
Rt. 2, Box 74, Asheville 28805		704-298-3239
Redinbaugh, Margaret G., Res. Assoc., Gen. 3632 Gardner, Box 7614; 4130 C. Western Blvd., 27606	2294	851-8754
Redmon, Thomas, Food Serv. Asst., Univ. Dining	3963	
Dining Hall, Box 7307		
Reece, William M., Agri'l. Res. Tech., Hort. Sci. 59 Kilgore, Box 4328; 1101 Robinfield Dr., 27603	3346	779-1534
Reed, James E., Act. Clk., Acct. Pay. 213 Admn. Serv. Ctr., Box 7204	3152	
Reed, Janice M., Admn. Sec., Stewart Thea. 1202 Univ. Stu. Ctr., Box 7306	3927	
Reed, Dr. Sandra M., (Clarke), Asst. Prof., Crop Sci. 4416A Williams, Box 7620; 1001 Whetstone Ct., 27609	3216	
Regan, Gail M., (Cliff), Word Processor, Soil Sci. 2234 Williams, Box 7619; P.O. Box 541, Coats 27521	2655	897-5742
Regan, Dr. Tom H., (Nancy), Prof., Phil., Phil. & Rel. 109 Winston, Box 8103; 3509 Eden Croft Dr., 27609	3214	782-0006
Register, Carolyn C., (Roy C.), Dist. Prog. Ldr., Home Ec., Agri'l. Ext. 301 Ricks, Box 7602; 3025 Allenby Dr., 27604	2380	821-5253
Rehbock, James M., Asst. Athl. Trainer, Athl. Weisiger-Brown Athl. Fac., Box 8502; 116 Lake Hollow Circle, Cary 27511	3960	467-6844
Reibold, Kay E., (Greg Malhoit), Prod., Media Serv., Hum. & Soc. Sci. G-116 Tompkins, Box 8101; 4108 Yates Pond Rd., 27606	3334	833-7885
Reid, Barbara B., (Tim), Admn. Sec., Min. Res. Lab. 180 Coxe Ave., Asheville 28801		704-251-6155
43 Lincoln Ave., Asheville 28803		704-274-3545
Reid, David W., (Joan), Instr., Comp. Sci. 242-C Daniels, Box 8206; 6015 Lake Wheeler Rd.	7239	772-0867
Reid, Elbert, (Jane), Asst. Prof., Agri'l. Comm. 4 Polk, Box 7603; 607 Frank St., 27604	7055	
Reid, Dr. P. Nelson, (Gisela), Prof., Dir., Social Work, Soc. & Anth. 334 1911 Bldg., Box 8107; 705 Blenheim Pl., 27612	3291	787-5691
Reid, Rosalind, Asst. Dir., News, Info. Serv. 219 Oberlin Rd., Box 7504; 1218 Deerfield Dr., Cary 27511	3470	467-1360
Reid, Dr. Traciell V., Asst. Prof., Pol. Sci. & Pub. Admin. 223 Link, Box 8102; 2804-21 Brigadoon Dr., 27606	2481	
Reid, William W., Prof. Emer., Hort. Sci. 213 Pamlico Dr., Washington, NC 27889		946-9015
Reiland, Dr. Thomas W., (Susan), Assoc. Prof., Stat. & Oper. Res. 604-D Cox, 324 Riddick, Box 7913; 1008 Plateau Ln., 27609	2535, 2350, 3786	848-4132
Reiman, Evelyn M., (Alan), Dir., Stu. Dev. 216 Harris, Box 7314; 1312 Timber Dr., Garner 27529	2441	772-1242
Reinert, Dr. Richard A., (Patricia), Prof., USDA-ARS, Plant Path. 207, Unit 3, 840 Method Rd., Box 7629; 1113 Yorkshire Dr., Cary 27511	3962	467-8186
Reisman, Dr. Arnold, Prof., Elec. & Comp. Engr. 430 Daniels, Box 7911; 816 Thatcher Way	2336	847-3359
Reller, Evelyn B., (Oscar), Comp. Prog., Stat. 509-E Cox, Box 8203; 416 Winterlochen Rd., 27603	2584	779-4531
Renegar, Ann P., Libr. Tech. Asst., Serials G-116 Library, Box 7111; P. O. Box 5764, 27650	3584	
Reno, Connie L., (James), Sec., Elec. & Comp. Engr. 432 Daniels, Box 7911; 1601 Woods Creek Dr., Garner 27529	2336	
Retchin, Marcia L., Lect., Engl. 101 Tompkins, Box 8105; 3040-N Walnut Creek Parkway, N., 27606	3854	859-1723
Reuer, Dr. John Phillip, (Eleanor), Prof., Arch. 301A Brooks, Box 7701; 117 Hillcrest Rd., 27605	2204	828-3871
Reusche, Dr. Gary A., (Carolyn), Ext. Seed Spec., Crop Sci. Ext. 4408 Williams, Box 7620; 227-C E. Park St., Cary 27511	3331	469-3334
Revels, Diane C., Clk. Recept., Human Resou. Admn. Serv. Ctr., Box 7210; 6572 Dwight Rowland Rd., Willow Springs 27592	2135	552-6139

Name, Title, Department and Address	Office Phone	Resid. Phone
Reymer, Dr. Arthur, (Stijn), Asst. Prof., Mar., Earth & Atmos. Sci. 302 Withers, Box 8208; 3300 Hall Pl., 27607	7282	829-1700
Reynolds, David J., (Helen), Gen. Utility Wkr., Motor Pool Sullivan Dr., Box 7219; 206 Plaza Dr., Garner 27529	2179	
Reynolds, Laura K., Detective, Lt., Public Safety Field House, Box 7220	2498	
Reynolds, Dr. Michael S., (Ann), Prof., Engl. 261 Tompkins, Box 8105; 3203 Merriman Ave., 27607	3870	755-1457
Reynolds, Rita H., (Hal), Admn. Sec., Ent. 2301 Gardner, Box 7613; 804 Ellynn Dr., Cary 27511	2746	467-6412
Reynolds, Dr. Stephen P., Asst. Prof., Physics 415 Cox, Box 8202; 3505 Palm Ct. #301, 27607	7751	787-7621
Reynolds, Terry B., Agri'l. Res. Asst., Poul. Sci. Univ. Res. Farm 2, Box 7608; Box P.22, Sandy Ridge Dr., Clayton 27520	2740	553-5166
Reynolds, Thomas B., (Carolyn), Res. Tech., Ani. Sci. Swine Eval. Sta., Clayton; Rt. 2, Box 207, Lane of Sir Lancelot, Garner 27529	553-7696	772-4657
Rhodes, Dr. Donald R., Prof., Elec. & Comp. Engr. 330A Daniels, Box 7911; 625 Cardinal Gibbons Dr., Apt. 101, 27606	2336	821-4572
Rhodes, Henry A., Jr., Ground Wkr., Phys. Plant Sullivan Dr., Box 7219; Rt. 1, Youngsville 27596	3408	556-1191
Rhodes, Janis Y., Dir., Trans. Admn. Serv. Ctr., Box 7221	3424	
Rhodes, Mary T., (Leonard), Pers. Asst., SVM 4700 Hillsborough St., Box 8401; Rt. 10, Box 364-1, 27603	829-4200	772-1301
Rhodes, Max S., Asst. Prof., Phys. Educ. 2022 Carmichael, Box 8111; 512 S. Lakeside Dr., 27609	2487	851-2607
Rhodes, Patsy Y., (J. T.), Sec., Univ. Ext. 200 McKimmon, Box 7401; 4900 Bell's Lake Rd., Apex 27502	2144	772-3956
Rice, Darrell B., (Deborah), Lab. Mgr., Ind. Engr. 104 Park Shops, Box 7906; Rt. 1, Youngsville 27596	2361	556-1294
Rice, Dr. James A., (Cindy), Asst. Prof., Ext. Fisheries Spec., Zool. 3109 Gardner, Box 7617; 701 Northcliff Dr., 27609	2741	846-8950
Rice, Dr. John C., (Elisabeth), Prof. Emer., Crop Sci. 4416 Woodbury Dr., 27612		782-4367
Rice, Philip W., (Phyllis), Res. Tech., Crop Sci. 840 Method Rd., Unit 3, Box 7629; Rt. 2, Box 268, Spring Hope 27882	3281	853-3161
Rich, Joanne F., (Carl), Comp. Sales Asst. Supv., SSS SSS, Box 7224; 314 Edinburgh Dr., Cary 27511	2161	467-7826
Rich, Nancev B., (Millard), Asst. Prof., Engl. 284 Tompkins, Box 8105; 1200 Bancroft St., 27612	3863	787-5190
Richard, Jamie B., (Gail), Instr., Text. Mgmt. & Tech. 206 Nelson, Box 8301; 219 Northcliff Dr., Durham 27712	3890	477-9655
Richards, Dawn L., (Marvin), Clk.-Typ., Crop Sci. 4210 Williams, Box 7620; 105 S. Atley Lane, Cary 27511	3331	467-8474
Richards, Dr. Jerry E., (Joanne), Asst. Prof., Ind. Engr. 342 Riddick Lab., Box 7906; 2312 Coley Forest Pl., 27612	2362	787-0929
Richards, John B., Agri'l. Res. Tech., Soil Sci. 3401 Williams, Box 7619; Rt. 3, Box 283, Oxford 27565	3285	693-9336
Richards, Margie C., Libr. Clk., Marking 1124 Library, Box 7111; 101 Hudson St., Apt. 4, 27608	2680	828-5903
Richards, Marvin D., (Dawn), Supv. Design Serv., Phys. Plant 7B Morris, Box 7219; 105 Atley Ln. S., Cary 27511	2184	467-8474
Richardson, Alice F., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 448 Dorothea Dr., 27601	3323	832-7165
Richardson, Arlene J., Rec. Supv., Reg. & Rec. 100 Harris, Box 7313; 101 Kempwood Apt. 10, Cary 27511	2572	
Richardson, Barbara F., Admn. Comp. Serv. 12 Peele, Box 7208	2459	
Richardson, Barbara W., (Rufus), Ent. Clk., IES 214 Page, Box 7902; 604 Buckingham Rd., Garner 27529	2358	772-8831
Richardson, Dr. Daniel C., (Kathryn E.Y.), Asst. Prof. Surgery, Comp. Ani. & Sp. Species Med., SVM 4700 Hillsborough St., Box 8401; 2200 Parkway Dr., 27603	829-4303	772-4474

Name, Title, Department and Address	Office Phone	Resid. Phone
Richardson, Elmer T., (Veor), Hskp. Asst., Phys. Plant Park Shops, Box 7219; Rt. 1, Box 274, Wendell 27591	3323	365-6518
Richardson, Frances M., Dir., Extradepart. Progs., Engr. 116-C Page, Box 7901; P-7 Raleigh Apts., 27605	3683	834-4821
Richardson, Garfield, Jr., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 109 Ramblewood Dr., 27609	3323	783-5661
Richardson, George, Carpenter, Phys. Plant, Park Shops, Box 7219	3323	
Richardson, Hazel M., Laborer, Phys. Plant Sullivan Dr., Box 7219; 509 Pitt Street, Zebulon 27597	3408	269-7957
Richardson, James C., Lab. Ani. Tech., Vet. Teach. Hosp., SVM	829-4200	834-5309
4700 Hillsborough St., Box 8401; 2520 Old Garner Rd. #218, 27603		
Richardson, John G., District Prog. Ldr., Agri'l. Ext.	2380	851-3685
301 Ricks, Box 7602; 1017 A8 Avent Hill, 27606		
Richardson, Joyce L., Libr. Clk., Vet. Med. Library	829-4218	779-2491
4700 Hillsborough St., Box 8401; 209D Johnson St., Garner 27529		
Richardson, Joyce W., Hskp. Asst., Phys. Plant Park Shops, Box 7219; P.O. Box 774, Spring Hope 27882	3323	478-5617
Richardson, Mary H., (Kurt), Const. & Renov. Tech.		828-9727
4B Morris, Box 7219; P.O. Box 37421, 27627		
Richardson, Robert E., (Barbara), Litho Press Oper., Univ. Graphics Sullivan Dr., Box 7226; 2005 Atkin Dr., 27610	2131	755-0793
Richardson, Stanley K., Hskp. Asst., Phys. Plant Park Shops, Box 7219	3323	
Richter, Carole S., (Conrad), Res. Asst. & Teach. Tech./Coord. Asst. Microb. & Elect. Micros. Ctr.	2664	469-2451
1219 Gardner, Box 7615; 804 N. Harrison Ave., Cary 27511		
Rickenbaker, Michael L., Const. Arch., Campus Plan. & Const.	2121	828-1420
219 Oberlin Rd., Box 7216; 1329 Mordecai Dr., 27604		
Ricks, Sallie W., Univ. Lands. Arch., Campus Plan. & Const.	2121	828-5074
219 Oberlin Rd., Box 7216; 3604 Clark Ave.		
Riddle, Dr. John M., (Margaret), Prof. & Head, Univ. Stud.	2479, 2470	787-4058
144 Harrelson, Box 7107; 3309 Leonard St., 27607		
Ridgeway, Dr. Don L., (Johanna), Prof., Stat. & Physics	2541	787-9496
518-D Cox, Box 8203; 4105 Glen Laurel Dr., 27612		
Rifki, Fatih A., (Hatice), Asst. Prof., Arch.	2206	832-9559
212B Brooks, Box 7701; 711 Wade Ave., 27605		
Riggins, Mona M., Clk.-Typ., For. Lang.	2475	
120 1911 Bldg., Box 8106; 545 Brent Rd., 27606		
Riggsbee, Jackie S., Admn. Asst., Ani. Sci.	2755	878-9766
123 Polk, Box 7621; 5602-E Falls of Neuse Rd., 27609		
Rigney, Jackson A., (Vie), Dean Emer., Int'l. Prog.		787-7642
2607 Wade Ave., 27607		
Riley, Elizabeth M., Sec., Educ. Ldrship & Prog. Eval.	3127	782-8381
608 Poe, Box 7801		
Riley, Michael A., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 704 Lunar Dr., 27610	3323	832-4379
Rincon, Dr. Magaly E., Res. Assoc., Bot.	3496	851-7132
4201-A Gardner, Box 7612; 461 Westcliff Ct., 27606		
Ringgold, Betsy B., (James D.), Acct. Clk., Ent.	2747	787-1238
2313 Gardner, Box 7613; 4407 Laurel Hills Rd., 27612		
Riordan, Dr. Allen J., (Mary Ellen), Assoc. Prof., Mar., Earth & Atmos. Sci.	7973	851-8476
428-C Withers, Box 8208; 721 Ravel St., 27606		
Risley, Dr. John S., (Dellaine), Prof., Physics	2524	832-9477
111 Bureau of Mines, Box 8202; 3210 Arthur Ct., 27607		
Risman, Dr. Barbara J., (Richard S. Kane), Asst. Prof., Soc. & Ant.	3114	542-2543
324 1911 Bldg., Box 8107; Rt. 4, Box 410, Pittsboro 27312		
Ritchie, Dr. David F., (Susan Brown), Assoc. Prof., Plant Path.	2722	544-5950
2419 Gardner, Box 7616; 4804 Marlborough Way, Durham 27713		
Rittenhouse, David L., (Susann), Asst. Dir. Stu. Ctr., Univ. Dining	2021	859-1140
Univ. Stu. Ctr., Box 7307; P.O. Box 33589, 27606		

Name, Title, Department and Address	Office Phone	Resid. Phone
Rives, Ann P., (Mike), Sec., Phil. & Rel. 100 Winston, Box 8103; 2727 Peachtree St., 27608	2477	781-8407
Rives, David M., (Ann), Gen. Utility Wkr., Phys. Plant 4700 Hillsborough St., Box 8401; 2727 Peachtree St., 27608	829-4217	781-8407
Riviere, Dr. Jim E., (Nancy), Assoc. Prof., Anat., Physiol. Sci. & Radiol. SVM 4700 Hillsborough St., Box 8401; 8420 Two Courts, 27612	829-4200	848-6637
Roach, William F., Boiler Oper., Phys. Plant 4700 Hillsborough St., Box 8401	829-4216	
Robarge, Dr. Wayne P., (Thea), Asst. Prof., Soil Sci. 3406 Williams, Box 7619; 717 Merrie Rd., 27606	2600	851-1496
Robbins, Donna B., Sec., Univ. Stu. Ctr. 3102 Univ. Stu. Ctr., Box 7306; 3031 Lake Wheeler Rd., 27603	2558	
Robbins, Nancy D., Sec., Music 203 Price Music Ctr., Box 7311; 4404 Quail Hollow Dr., 27609	2981	876-5418
Robbins, William R., (Donna), Mech., Univ. Res. Unit 1 3720 Lake Wheeler Rd., Box 7601; 3031 Lake Wheeler Rd., 27603	2759	496-6231
Robbins, Dr. Woodrow E., Assoc. Prof., Comp. Sci. 131-J Daniels, Box 8206; 418 S. Boylan Ave., 27603	7003	832-6761
Robenolt, Sallie P., Res. Tech., Poul. Sci. Dearstyne Avian Res. Ctr., Box 7608; 2727 Van Dyke Ave., 27607	2692	834-5158
Roberds, James H., (Kay), Res. Geneticist, For. Serv., USDA, Gen. 2543 Gardner, Box 7614; 1506 Ashburton Rd., 27606	2287	851-3786
Roberson, Aline B., Pers. Mgr., SSS SSS, Box 7224; 3300 Dogwood Dr., 27604	2161	872-1465
Roberson, Etha M., (Porter), Med. Supply Tech., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 2520 Garner Rd., Lot 218, 27610	829-4200	
Roberson, Gary T., (Angelia), Instr., Bio. & Agri'l. Engr. 112 Weaver, Box 7625; 201 Brook Rock Ln., Garner 27529	2694	779-3713
Roberson, Kaye, Sec., Ani. Sci. Tidewater Res. St., Rt. 2, Plymouth 27962; Rt. 2, Box 20, Jamesville 27846	793-4118	793-5301
Roberson, Larry C., (Annette), Sys. Prog. Mgr., Comp. Ctr. B 15 Hillsborough Bldg., Box 7109; 3507 Melrose Dr., 27604	2517	832-4538
Roberson, Marshall J., Food Serv. Asst., Univ. Dining Erdahl-Cloyd Annex, Box 7307	3270	
Roberts, Betty C., Cash., SSS SSS, Box 7224; 3033 Timberlake Dr., Apt. B, 27604	2161	
Roberts, Billy R., (Mildred), NMR Tech., Chem. 11 Dabney, Box 8204; Rt. 2, Box 290, Creedmoor 27522	2248	528-0301
Roberts, Donald R., Dir., Int'l. Stu. Off., Stu. Aff. 1201 Univ. Stu. Ctr., Box 7306; P.O. Box 611, 27602	2961	839-1404
Roberts, Dr. John F., (Mary Jane), Prof., Zool. 1617 Gardner, Box 7617; 709 Merrie Rd., 27606	2580	851-4843
Roberts, Julia T., Area Dir., Housing & Resid. Life 208 Harris, Box 7315; 27695	2406	6699
Roberts, Dr. Malcolm C., Prof., Food Ani. & Equ. Med.-SVM 4700 Hillsborough St., Box 8401; Rt. 20, Box 516-1A, 27614	829-4242	847-0502
Roberts, Nancy T., Admn. Asst., For. Resou. 2028A Biltmore, Box 8001; 3905 Wendy Ln., 27606	2883	851-4767
Roberts, Dr. Steven M., (Brenda), Assoc. Prof., Ophth., Comp. Ani. & Sp. Species Med., SVM 4700 Hillsborough St., Box 8401; 1012 Buckhorn Rd., 27529	829-4330	779-4742
Roberts, Thomas C., Lect., Phys. Educ. 2016B Carmichael, Box 8111; 301 Abbey Lane, Cary, 27511	2487, 2488	467-7109
Roberts, William F., (Bonnie), Instru. Mkr., Text. B-35 Nelson, Box 8301; Rt. 2, Box 26C, Angier 27501	3074	639-4217
Roberts, Dr. William M., (Irene), Prof. Emer., Food Sci. Box 7624; 47 Springmoor Ct., 27609		848-7047
Robertson, Carole A., Lab. Ani. Facil. Mgr. Tech., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; Rt. 7, Box 229A, Mt. Moriah Rd., Durham 27707	829-4200	489-1739

Name, Title, Department and Address	Office Phone	Resid. Phone
Robertson, Dr. Ian D., Resid., Path., SVM 4700 Hillsborough St., Box 8401	829-4200	
Robertson, Jackie G., (Chuck), Sec. to Dean, Design 200 Brooks, Box 7701; P.O. Box 396, Knightdale 27545	2201, 2208	266-3735
Robertson, Neal T., (Laurin), Grnhse. Mgr., Crop Sci. 840 Method Rd., Unit 3, Box 7629; 1801 Stillwater Dr., 27607	2642	782-4743
Robertson, Robert L., (Ruth), Ext. Prof. Emer., Ent. 409 Holly Cir., Cary 27511		467-1162
Robertson, Steven W., (Linda), Asst. Football Coach, Athl. Weisiger-Brown Athl. Fac., Box 8502	2114	
Robinette, Dr. C. Lee, (Janet), Asst. Prof., Anat., Physiol. Sci. & Radiol., SVM 4700 Hillsborough St., Box 8401; 115 Escher Ln., Cary 27511	829-4289	469-1432
Robinson, Allan R., Photo., Agri'l. Comm. 14 Ricks, Box 7603; 717 Chamberlain St., 27607	2861	834-7908
Robinson, Denver D., (Nell), Dist. Ext. Chm. Emer., Agri'l. Ext. Serv. 1203 Sturdivant Dr., Cary 27511		467-6284
Robinson, Larry G., Prog. Consult., Comp. Ctr. B-17F Hillsborough Bldg., Box 7109; 106 Bryan Rd., Garner 27529	2517	772-7726
Robinson, Linda., (Mark), Vis. Lect., For. Lang. 138 1911 Bldg., Box 8106; 4831 Radcliff Rd., 27609	2475	782-6103
Robinson, Dr. Mendel L., (Donna), Assoc. Prof., Asst. Dept. Head, Text. Mgmt. & Tech. 144 Nelson, Box 8301; 4301 Galax Dr., 27612	3890	787-0545
Robinson, Dr. Robert A., (Dottie), Asst. Athl. Dir., Athl. 218 Case Athl. Ctr., Box 8501; 5400 Avent Ferry Rd., 27606	3315	851-4319
Robison, Dr. O. Wayne, Prof., Ani. Sci. 226 Polk, Box 7621; 632 S. Lakeside Dr., 27606	2769	851-2670
Rochelle, Annie Joe, (Sonnie), Sec., Con. Educ. & Professional Dev. 147-J McKimmon, Box 7401; Rt. 2, Box 150-G, 27610	3007	266-0832
Rochow, Dr. Theodore G., (Elizabeth C.), Assoc. Prof. Emer., Text. Engr. & Sci. Nelson, Box 5006; 3008 Charwood Pl., 27612	3072	787-2469
Rock, Dr. George C., Prof., Ent. 1130 Grinnells, Box 7626; 605 Fox Chase Ct., 27606	3804	851-8628
Rockness, Dr. Joanne W., (Howard), Asst. Prof., Ec. & Bus. 209-E Hillsborough Bldg., Box 8110; 13 Charrington Pl., Chapel Hill 27514	3881	489-0275
Roddy, Christopher J., (Kathryn), Teach. Tech., Physics 116 Cox, Box 8202; 4109 Iver Johnson Dr., 27606	2521	
Roddy, Kathryn Klibbe, (Chris), Admn. Sec., Physics 104-B Cox, Box 8202; 4109 Iver Johnson Dr., 27606		
Rodgers, Jeff L., Media Tech., McKimmon Ctr. 139 McKimmon Ctr., Box 7401; Rt. 4, Box 297, Four Oaks 27524	2277	963-2484
Rodgers, Jerry G., (Mona), Ext. Media Ed., Agri'l. Comm. 2 Polk, Box 7603; 1113 Medlin Dr., Cary 27511	7055	467-6048
Rodgers, Mona C., (Jerry), Sec., Ext. 4-H & Youth Dev. 200 Ricks, Box 7606; 1113 Medlin Dr., Cary 27511	3242	467-6048
Rodgers, Dr. Raymond S., (Peggy J. Beasley-Rodgers), Assoc. Prof., & Asst. Head, Speech-Comm. 214A Winston, Box 8104; 4300 Pickwick Dr., 27612	2450	782-6329
Rodman, Dr. Robert D., Assoc. Prof., Comp. Sci. 131L Daniels, Box 8206; 2509 Winterbury Ct., 27607	7480	839-2268
Rodriguez, Dr. Jesus, (Rosalina), Asst. Prof., Math. 329 Harrelson, Box 8205; 2412 Village Grove Rd., 27612	3265	847-7503
Rodriguez, Jorge A., (Cynthia), Res. Tech., Bot. 1229 Gardner, Box 7612; 5515 Kaplan Dr., 27606	2225	851-4687
Roe, Dr. Richard M., (Janet), Asst. Prof., Ent. 2325 Gardner, Box 7613; 304 Electra Dr., Cary 27511	3771	467-3301
Roe, Ruby E., Food Serv. Asst., Univ. Dining Dining Hall, Box 7307	3963	
Rogers, Dr. Brenda H., (Weaver), Asst. Dir., Inst'l. Res. 202 Peele, Box 7002; 1401 Kershaw Dr., 27609	2776	783-8473
Rogers, Charles N., (Shirley), Assoc. Prof. Emer., Wood & Paper Sci. 3409 Doyle Rd., 27607		787-5589

Name, Title, Department and Address	Office Phone	Resid. Phone
Rogers, Dorothy A., Sign Painter, Phys. Plant Park Shops, Box 7219; 1929-A North Hills Dr., 27612	3323	787-9008
Rogers, Ella M., Libr. Technical Asst., Monographic Cat. Library, Box 7111; 208 Bart St., 27610	2603	834-2444
Rogers, Henry J., APMS, Mil. Sci. 158 Reynolds Coliseum, Box 7309	2428	
Rogers, Judith A., Sec., For. 2018 Biltmore, Box 8002; Rt. 1, Box 364-1, Angier 27501	2891	639-2487
Rogers, Dr. Lyle B., (Grace), Assoc. Dean, Stu. Aff. 720 Beaver Dam Rd., 27607		833-9109
Rogers, Marvin B., Book Returns Clk., Book Div., SSS SSS, Box 7224; 4316 Presley Ct., Apt. A, 27604	3117	872-0479
Rogers, Reginald, (Deborah), Res. Tech., SVM 4700 Hillsborough St., Box 8401; 4501 Kilcullen Dr., 27604	829-4200	876-4890
Rogers, Richard A., (Ann), Lab. Supv., SVM 4700 Hillsborough St., Box 8401; 3723 Cranston Rd., Garner 27529	829-4200	772-7968
Rogers, Sylvia L., (Gerald W., Sr.), Acct. Tech., Budg. Off. 206 Holladay, Box 7206; 3101 Dogwood Dr., 27604	2175	872-1711
Rogister, Susan Dianne, Clk.-Typ., Agri'l. Ext. 1110 Grinnells, Box 7626; 2125 Noble Rd., 27608	3727, 3741	833-0569
Rohrbach, Dr. Roger P., (Jeanette), Prof., Bio. & Agri'l. Engr. 188 Weaver, Box 7625; 5012 Huntingdon Dr., 27606	3101	851-4047
Rohrbaugh, Mary E., Loan Off., Credit Union 2802 Hillsborough	2686	
Roise, Dr. Joseph P., (Claire), Asst. Prof., For. 3024E Biltmore, Box 8002; 7840 Harbor Dr., 27612	2891	846-9163
Rollins, B. Jean, Sec., Furn. Mfg. & Mgmt. 343 Riddick, Box 7906; 6813 Franklin Heights Rd., Cary 27511	3335	851-6131
Rollins, Dr. E. William Jr., Assoc. Prof., For. Lang. 128 1911 Bldg., Box 8106; 2406 Oxford Rd., 27608	2475	829-9557
Rollins, Dr. Yvonne B., Asst. Prof., For. Lang. & Lit. 137 1911 Bldg., Box 8106; 715 Godwin Ct., 27606	2475	851-7293
Rollinson, Joan M., Wordprocessor, Hort. Sci. Ext. 224 Kilgore, Box 7609; 7104 Falls of Neuse Rd., 27609	3167	847-0345
Romano, Carmine E., Carpenter, Phys. Plant Park Shops, Box 7219	3323	
Roote, Robert T., (Alyse), Lect., Engl. G-103-A Tompkins, Box 8105; 1548 Varsity Dr., 27606	3854	834-3366
Rosch, Dr. Joel B., (Alice Lepie), Asst. Prof., Pol. Sci. & Pub. Admin. 229 Link Bldg., Box 8102; 2704 Barmettler Dr., 27607	2481	828-3527
Rose, Anita R., Coord., Engr. Co-op 115 Page, Box 7904; 1400 Park Dr., 27605	2300	828-1319
Rose, David L., Safety Inspector, Public Safety Field House, Box 7220	7915	
Rose, Joan F., Info. & Comm. Spec., UNC Ctr. for Pub. TV 211-A TV Ctr., Box 8601	2853	
Rose, Larry P., Res. Tech., Micro. Path., & Parasit., SVM 4700 Hillsborough St., Box 8401; Rt. 3, Box 266, Fuquay 27526	829-4200	552-6293
Rose, Dr. Nicholas J., (Muriel), Prof., Math. 212 Harrelson, Box 8205; 6713 Candlewood Dr., 27612	3320	848-8033
Rosendahl, Lou F., (Fred), Supv., Fund Acct. 211 Admn. Serv. Ctr., Box 7203; 6100 Winthrop Dr., 27612	2149	787-9245
Ross, Dr. John P., (Harriet), Prof. Emer., USDA, Plant Path. 2615 Gardner, Box 7616; 2008 Nakoma Pl., 27607	2735	782-5408
Ross, Linda, (Bill), Admn. Sec., Stat. 112 Cox, Box 8203; 105 Earhart Cir., Cary 27511	2420	467-6062
Ross, Lowell S., Sys. Mgr., Comp. Graphics Ctr. 342 Daniels, Box 7106; 1921-204 Eyrie Court, 27606	3430	859-1603
Ross, William A., (Linda), Lect., Graphic Comm./Occup. Educ. 510-M Poe, Box 7801; 105 Earhart Cir., Cary 27511	2234	467-6062
Rossana, Dr. Robert J., (Eileen), Assoc. Prof., Ec. & Bus. 310C Hillsborough Bldg., Box 8110; 5837 Morning Forest Dr., 27609	2885	878-6621
Rosser, Lou W., Lect., Engl. 102 Tompkins, Box 8105; 410 Marlowe Rd., 27609	3854	787-9613

Name, Title, Department and Address	Office Phone	Resid. Phone
Roth, Sara A., (Richard), Sec., Crop Sci. Ext. 4401 Williams, Box 7620; 4021 Cleveland Rd., Clayton 27520	2594	934-7308
Rouse, Ann P., Sec., Stat. 518 Cox, Box 8203; 214 Hickory St., Cary 27511	2541	467-5915
Rouse, Charles S., Comp. Oper. Mgr., Admn. Comp. Serv., Data Proc. 12 Peele, Box 7208; 124 Colleton Rd., 27610	2459	828-8946
Rouse, Patricia, Hskp. Asst., Phys. Plant Park Shops, Box 7219; 1518 Raleigh Blvd., 27610	3323	832-5192
Rousseau, Dr. Ronald W., (Sandra), Prof., Chem. Engr. 107 Riddick, Box 7905; 1216 Blenheim Dr., 27612	2329	781-6349
Routten, Carma-Linda, Nurse Supv., Health Serv. Clark Inf., Box 7304; Rt. 3, Box 307-B, 27603	2562	
Rovner, Dr. Irwin, (Ann), Assoc. Prof., Soc. & Anth. B2B 1911 Bldg., Box 8107; 1902 Alexander Rd., 27608	2491	834-1921
Rowe, Anne D., Supv., Clin. Vir. Lab., SVM 4700 Hillsborough St., Box 8401; 2222 The Circle, 27608	829-4315	
Rowe, Viviette J., Teller, Credit Union 2802 Hillsborough St., Box 8609	2686	
Rowland, Gloria T., Ext. Sec., Food Sci. 129 Schaub, Box 7624; 2372 Fox Ridge Manor, 27610	2956	821-3788
Rowland, Joan D., Sales Clk., SSS SSS, Box 7224	3117	
Rowland, Pamela H., (Stan), Libr. Asst., For. Resou. Libr. 4012 Biltmore, Box 8001; 1603 Ken Dr., Fuquay-Varina 27526	2306	552-9250
Royal, Phyllis T., (Erroll), Cash., Fin. & Bus. 2 Peele, Box 7213	2988	
Royals, Terri L., Teller, Credit Union 2802 Hillsborough St., 8609	2686	779-1655
Royster, Dr. Larry H., (Julie), Prof., Mech. & Aero. Engr. 1217 Broughton, Box 7910; 4706 Connell Dr., 27612	3024	781-2396
Rozensky, Susanne, Sec., Ec. & Bus. 215 Patterson, Box 8109; 1104 Donaldson Dr., Cary 27511	2256	467-9173
Rozier, Dr. Justine J., Ext. Prof. Emer., Home Ec. Ext. Ricks; 2402 Stafford Ave., 27607	2770	832-1103
Rozier, N. Larry, (Cathy), Admn. Asst., Poul. Sci. 125 Scott, Box 7608; 4901 Deer Garden Ct., 27606	2627	851-3918
Rubes, Edward A., Analyst Prog., Libr. Sys., Libr. 2312 Library, Box 7111; 104 McIntosh Ct., Cary 27511	2339	467-0997
Rubes, Rosina D., Clk., Dean's Off., Educ. 422 Poe, Box 7801; 1510 Greenwood Dr., 27608	2231	821-3949
Rubin, Dr. A. Robert, Asst. Prof., Bio. & Agri'l. Engr. 210-A Weaver, Box 7625; 34 Audley Ln., Chapel Hill 27514	2675	967-9307
Rubin, Dr. Eva R., (Louis), Assoc. Prof., Pol. Sci. & Pub. Admin. 223 Link Bldg., Box 8102; 702 Gimghoul, Chapel Hill 27514	2481	929-3410
Ruble, Sandra L., (William D., Jr.), Clk.-Recept., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 218 Urban Dr., Cary 27511	829-4200	467-8103
Rucker, Dr. James W., Asst. Prof., Text. Chem. 209 Clark, Box 8302; 807 N. Elm St., 27604	2551	821-3888
Rucker, Dr. Randal R., (Sharie), Asst. Prof., Ec. & Bus. 203 Patterson; 1024 Clare Court, Cary 27511	3951	469-3484
Rudner, Dr. Lawrence S., (Lauren), Assoc. Prof., Engl. 107 Tompkins, Box 8105; 1000 Ravenwood Dr., 27606	3854	851-5548
Ruess, Jeanne C., (Donald), Clk., NCDHIA, Ani. Sci. 111 Polk, Box 7621; 5813 Morning Forest Dr., 27609	2771	876-7485
Ruffin, Barbara M., (Eddie), Sec., Text. Mgmt. & Tech. 142 Nelson, Box 8301; 106 Nivens Court, Garner 27529	3442	772-6139
Ruffner, Dorothy S., (Van), Acct. Tech., Water Resou. Res. Inst. 225 Page, Box 7912; 4121 Yaddin Dr., 27609	2815	782-2680
Ruffy, Dr. Rebeca C., (Thomas W.), Asst. Prof., Crop Sci. 4237-C Williams, Box 7620; 6004 Tarnhour Ct., 27612	3216	848-1607
Ruffy, Dr. Thomas W., Jr., (Rebeca), Asst. Prof., Crop. Sci. & Bot. 4320 Williams, Box 7620; 6004 Tarnhour Ct., 27612	3216	848-1607

Name, Title, Department and Address	Office Phone	Resid. Phone
Rulla, Dr. James L., Asst. Prof., Math. 360 Harrelson, Box 8205	3796	
Runion, Sharon L., Ext. 4-H Spec., Ext. 4-H & Youth Dev. 202 Ricks, Box 7606; 640 Chappell Dr., 27606	3242	833-7544
Ruppel, Richard J., (Kathleen), Lect., Engl. 202 Tompkins, Box 8105; 101 Taylor St., Chapel Hill 27514	3863	942-1058
Rushing, Dr. John E., (Kelli), Ext. Asst. Prof., Food Sci. 129 Schaub, Box 7624; 902 Washington St., Cary 27511	2956	469-2125
Russ, John C., Res. Assoc., Engr. Res. Serv. Div. 2148 Burlington, Box 7916; 213 Merwin Rd., 27606	3328	851-8111
Russell, Dr. Burton L., (Janice), Assoc. Prof., Speech-Comm. Thompson Thea., Box 8104; 3724 Randall Rd., Garner 27529	2405	772-5478
Russell, Dr. Darcy L., Res. Assoc., Microb. 4602 Gardner, Box 7615; 3533-101 Ivy Commons Dr., 27606	2393	839-5592
Russell, Donna R., Reg. Clk., Reg. & Rec. 100 Harris, Box 7313; 2109 Milburnie Rd., 27510	2572	
Russell, Dr. Idonna E., Assoc. Prof. Emer., Soc. Wk. Prog., Soc. & Anth. Box 8107; 3513 Wordsworth Pl., 27609		782-1292
Russell, Irish L., Hskp. Asst., Phys. Plant Park Shops, Box 7219	3323	
Russell, Marjorie W., (Forrest), Sec., Pers., Agri'l. Ext. Serv. Admn. 108 Ricks, Box 7602; 204 Gray St., Cary 27511	2812	467-9494
Russell, Michael E., Micro., Path., & Parasit., SVM 4700 Hillsborough St., Box 8401; 1326P Wicklow Ct., Cary 27511	829-4390	467-8280
Russell, Dr. Phillip E., (Jeanne), Dir., Analytical Instrumentation Facility, Assoc. Prof., Mat. Engr. 232 Riddick, Box 7907; 4920 Kunding Ct., 27606	7501	839-0503
Russell, Roger L., Libr. Clk., Circ. 1214 Library, Box 7111; 522 Kirby St., 27606	3364	833-6158
Russell, Thomas L., (Jane), Instructional Technologist, Text. Ext. 301 Nelson, Box 8301; 2861 Rue Sans Famille, 27607	3761	782-2226
Rust, Jon P., (Staci), Instr., Text. Engr. & Sci. B-50 Nelson, Box 8301; 3809H Sherman Ave., 27606	3485	859-1451
Rust, Dr. Paul J., (Rebecca Ball), Assoc. Prof. Emer., Curr. & Inst. 402 Poe; 326 Golf Course Dr., 27610	3221	828-5551
Rust, Dr. Richard R., (Janet), Asst. Prof., Civil Engr. 400 Mann, Box 7908; 2721 A Dover Farm Rd., 27606	2331	859-3647
Ruth, Bobby G., (Louise), Lect., Engl. 120 Tompkins, Box 8105; 2268 The Circle, 27608	3854	834-2597
Rutherford, Dr. Henry A., (Norma), Prof. Emer., Text. Chem. 117 Mt. Vernon Dr., Wilmington 28403		256-3854
Ruzsa, Stephanie M., (Peter), Res. Tech., Gen. 3632 Gardner, Box 7614; 3021 Mayview Rd., 27607	2294	833-8390
Ryan, Clifton E., (Pam), Agri'l. Res. Asst., Hort. Sci. Res. Unit 4, Box 7609; P.O. Box 224, Wilson's Mill 27593	3144	833-7423
Ryan, Glenn E., (Brenda), Agri'l. Res. Tech., Ani. Sci. 4616 Reedy Creek Rd., Unit 1, Box 7621; 2001 Trinity Rd., 27607	851-4868	851-3958
Ryan, Jeanine M., Vet. Tech., Vet. Teach. Hops., SVM 4700 Hillsborough St., Box 8401	829-4200	
Ryan, Valerie G., (James), Acct. Tech., Fund. Acct. 213 Admn. Serv. Ctr., Box 7203; 4749H Courtney Ln., 27604	2159	872-6853

S

Sack, Dr. Ronald H., Prof., Hist. 132 Harrelson, Box 8108; 2411 Lake Dr., 27609	2485	781-6027
Safley, Dr. Charles D., (Charyl), Assoc. Prof., Ext. Ec. & Bus. 210-B Patterson, Box 8109; 4516 Keswick Dr., 27609	3951	787-4024
Safley, Dr. Lawson M., Jr., (Pamela), Assoc. Prof., Bio. & Agri'l. Engr. 275 Weaver, Box 7625; 3504 Sloan Ct., 27606	3121	851-8528
Safrit, Marlene S., Data Proc. Coord., Ext. Pers. 112 Ricks, Box 7602; 2006 Beecham Cr.	2814	782-1084

Name, Title, Department and Address	Office Phone	Resid. Phone
Sagan, Dr. Hans, (Ingeborg), Prof., Math.	3085	787-2837
339 Harrelson, Box 8205; 5004 Glen Forest Dr., 27612		
Sahrave, Raeann, Teller, Credit Union	2686	
2802 Hillsborough St., Box 8609		
Saksa, Paul S., Comp. Programmer, Admn. Comp. Serv.	2794	489-2989
B 21 Hillsborough Bldg., Box 7209; 3312 Chapel Hill Rd., Durham 27706		
Salas, Rudy C., (Julia), Elect. Tech., Elec. & Comp. Engr.	2336	834-1264
409 Daniels, Box 7911; 1400 Glenwood Ave., 27605		
Salazar, Melissa M., (Frank), Admn. Sec., CAMCORE Coop., For.	2738	781-9019
Res. Annex West, Box 8007; 412 Dartmouth Rd., 27609		
Salter, Dr. M. Lee, (Terry), Dir., Counseling Ctr.	2424	362-0408
200 Harris, Box 7312; Rt. 4, Box 392, 27606		
Salzillo, LuAnn, (Dale), Draftsperson, Mar., Earth & Atmos. Sci.	3716	365-4645
104 Daniels, Box 8208; Rt. 3, Box 169A, Wendell 27591		
Sampson, Dr. Herman A., III, Ec. & Bus.	3881	469-2975
209-A Hillsborough Bldg., Box 8110; 114 Clay St.		
Samsell, Lennie J., Res. Tech., Ani. Sci.	2763	846-7039
310 Polk, Box 7621; 6805 Miles Dr., 27609		
Sanchez, Dr. Pedro A., (Wendy), Prof. & Coord., Tropical Soils Prog., Soil Sci.	2838	782-3573
3104 Williams, Box 7619; 3421 Horton St., 27607		
Sanchez, Wendy L., (Pedro), Coord., Diagnostic Teach. Clinic	7061	782-3573
602-D Poe, Box 7801; 3421 Horton St., 27607		
Sanders, Albert L., Food Serv. Asst., Univ. Dining	3963	
Dining Hall, Box 7307		
Sanders, Anthony, (Mattie), Grnhse. Mgr., Phyt.	2778	772-2796
2003 Gardner, Box 7618; 5100 Royal Acre Dr., 27610		
Sanders, Billy R., Laborer, Phys. Plant	3408	829-1329
Sullivan Dr., Box 7219; 2616 Fernbrook Rd., 27610		
Sanders, Dr. Douglas C., (Ellen), Prof., Hort. Sci.	3283, 3284	782-7689
230 Kilgore, Box 7609; 187-C Hillside Dr., 27612		
Sanders, Gerald W., Mach. Oper., Phys. Plant	3479	553-4539
18 Riddick Stad., Box 7219; 2244 Big Pine Rd., 27520		
Sanders, Gladys M., Hskp. Asst., Phys. Plant	3323	828-8444
Park Shops, Box 7219; 1416 Carnage Dr., 27610		
Sanders, Joseph L., (Dorothy Jean), Hskp. Asst., Phys. Plant	3323	828-5089
Park Shops, Box 7219; 529 Lansing St., 27610		
Sanders, Leomie B., Hskp. Asst., Phys. Plant	3323	772-1742
Park Shops, Box 7219; 520 Church Rd., 27603		
Sanders, Linda W., (David Consbruck), Asst. Head, Arch.	2204, 2205, 2206	787-8883
221 Brooks, Box 7701; 1300 Canterbury Rd., 27608		
Sanders, Mary L., Purch. Off., Purch. & Stores	2171	828-9791
210 Alumni, Box 7212; 2710 Milburnie Rd., 27610		
Sanders, Raphael, (Lucille), Grounds Supv., Phys. Plant	3408	553-7607
Sullivan Dr., Box 7219; 2244 Big Pine Rd., Clayton 27520		
Sanders, Robert L., Parking Control Off., Admn. Serv. Ctr.	3424	
Box 7221		
Sanders, Vickie S., LPN, Health Serv.	2562	
Clark Inf., Box 7304; 2400 Rock Quarry Rd., 27610		
Sanderson, Glenn G., (Marilee), Prod. Mgr., Univ. Graphics	2131	467-9999
Sullivan Dr., Box 7226; 1217 Deerfield Dr., Cary 27511		
Sandlin, Robert, Const. Estimator, Phys. Plant	3323	
Park Shops, Box 7219; Rt. 5, Box 81, Apex 27502		
Sanford, Dr. Robert L., Jr., Res. Assoc., For.		
Biltmore, Box 8002		
Sanii, Dr. Ezat T., Asst. Prof., Ind. Engr.	7816	851-0556
202 Park Shops, Box 7906; 1299-A Schaub Dr., 27606		
San Julian, Dr. Gary J., (Nancy), Assoc. Prof., Zool. & Ext. Wildlife Spec., Zool.	2741	779-3216
3112 Gardner, Box 7617; 2001 Englewood Dr., Apex 27502		
Sanoff, Henry, (Joan), Prof., Arch.	3785	829-9079
102 Brooks Add., Box 7701; 405 W. Park Dr., 27605		
Sanozky-Dawes, Rosemary B., (Mickey Dawes), Res. Tech., Food Sci.	2974	839-2021
301 Schaub, Box 7624; 2412 Cavalier St., 27603		

Name, Title, Department and Address	Office Phone	Resid. Phone
Sapp, Carolyn J., Acct. Tech., Dean's Off., Hum. & Soc. Sci. 105 Link Bldg., Box 8101; 7001 Battlebridge Rd., 27610	2467	772-7068
Sappie, Glenn. (Ruth E.), Res. Asst., Ec. & Bus. 314 Hillsborough Bldg., Box 8110; 329 Bainbridge Cir., Garner 27529	2885	779-5478
Sargent, Dr. Frank D., (Hedi), Prof., Ani. Sci. 111 Polk, Box 7621; 3017 Rue Sans Famille	2771	782-3894
Sargent, Jacqueline C., Sec., Univ. Rel. 10 Holladay, Box 7505; 406 Rustic Ridge Rd., Cary 27511	2850	467-5281
Sarginger, Phyllis A., (Francis), Sec., Stat. 601-A Cox, Box 8203; 4405 Waterbury Rd., 27604	2533	876-6331
Sartin, Eddie, Inter-Varsity, Coop. Campus Min. 702-C Smithdale Dr., 27607	859-0922	
Sasscer, Carroll M., (Sarah), Res., Crop Sci. Box 7620; 516 Test Farm Rd., Waynesville 28786		704-452-5608
405 Hemlock Lane, Greenville, TN 37743		615-639-8286
Sasser, Carmen B., (Carroll), Sec., Ent. Ext. 2309 Gardner, Box 7613; 321 Meredith St., 27606	2697	851-3798
Sasser, Dr. Joseph N., (Elizabeth), Prof. Emer., Plant Path. 2414 Gardner, Box 7616; 628 Grove Ave., 27606	2721	851-4598
Sasser, L. Ralph, (Helen), Dist. Ext. Chm. Emer., Agri'l. Ext. Serv. Rt 2, Box 250, Elizabethtown 28337		862-3746
Sasser, Dr. Preston E., (Ethel), Adj. Assoc. Prof., Text. Engr. & Sci. Cotton, Inc., 4505 Creedmoor Rd., 27612; 8716 O'Neal Rd., 27612	782-6330	787-5646
Satterfield, Vicky J., (Howard), Res. Tech., Micro., Path., & Parasit., SVM	829-4200	878-9362
4700 Hillsborough St., Box 8401; 7323 Circlebank Dr., 27609		
Satterwhite, Connie F., Sec., Ent. 840 Method Rd., Box 7628; 1315 Kingston Ridge Rd., Cary, 27511	2638	467-0726
Satterwhite, Kenneth E., Constr. Reno. Tech., Phys. Plant 15 Morris, Box 7219; Rt. 7, Box 556, Louisburg 27549	2184	496-2544
Saucier, Dr. Walter J., Prof. Emer., Mar., Earth & Atmos. Sci. 432A Withers, Box 8208; 2000 Hillock Dr., 27612	7450	781-2865
Sauls, Inez B., Res. Tech., Zool. 1540 Gardner, Box 7617; 1020 Rand Rd., Garner 27529	3502	772-2327
Sauls, Jane W., (Lindy), Sec., Clothing, Agri'l. Ext. Serv. F-1 Ricks Annex, Box 7605; 1127 Hardimont Rd., 27609	2770	876-7306
Saulters, Brian E., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 825 Navaho Dr., #201, 27609	3323	876-7619
Saunders, David, (Linda), Electronics Tech., Physics 302 Cox, Box 8202; 2933 Henslowe Dr., 27605	7976	833-0832
Saunders, Dorothy L., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 2505 Melvid Ct., 27610	3323	755-1786
Saunders, Eugene M., (Neena), Agri'l. Res. Tech., Crop Sci. 102 Weed Sci. Ctr., 3123 Ligon St., Box 7627; 3033 Lewis Farm Rd., 27607	2867	782-4439
Savage, Dr. Carla D., (Griff Bilbro), Assoc. Prof., Comp. Sci. 123-C Daniels, Box 8206; 309 Middleton Ave., Cary 27511	7938	467-8930
Savage, Deborah, Sec., Ec. & Bus. 18 Patterson, Box 8109; Rt. 9, Box 133-A, 27606	2258	
Savage, Rebecca J., (J.P.), Sec., Physics 400 Cox, Box 8202; 8412 Fayetteville Rd., 27603	2512	772-3069
Savage, Dr. Robert G., (Nancy), Assoc. Prof., Math. 235 Harrelson, Box 8205; 1006 Vickie Dr., Cary 27511	3157	467-1502
Savage, Wendy, (James Savage), Photographer, Biomed. Comm. Ctr., SVM	829-4206	596-3800
4700 Hillsborough St., Box 8401; 921 Jones Cir., Durham 27703		
Sawhney, Dr. M. Mohan, (Sharda), Assoc. Dean, Prof., Soc., Hum. & Soc. Sci. 106 Link Bldg., Box 8101; 404 E. Rowan St., 27609	2467	787-9492
Sawyer, Mary S., (Charles B.), Prog. Analyst, Admn. Comp. Serv. B21 Hillsborough Bldg., Box 7209; 2620 Wells Ave., 27608	2794	781-8674
Saxe, Dr. Raymond F., (Doreen), Prof., Nuc. Engr. 1122 Burlington, Box 7909; 1808 Fairley Dr., 27607	2302	851-3454
Saxena, Dr. Vinod K., (Indra), Assoc. Prof., Mar., Earth & Atmos. Sci. 300 Withers, Box 8208; 3929D Marcom St., 27606	7290	829-1331

Name, Title, Department and Address	Office Phone	Resid. Phone
Sayers, Dr. Dale E., Prof., Physics 417 Cox, Box 8202; 2870 Wycliff Rd., 27607	2515	787-4098
Saylor, Dr. LeRoy C., (Marilyn), Assoc. Dean, For. Resou., & Asst. Dir., N.C. Agri'l. Res. Serv.	2883	851-0590
2028-C Biltmore, Box 8001; 809 Merwin Rd., 27606		
Scandalios, Dr. John G., (Penny), Distinguished Univ. Prof., Gen. 3632 Gardner, Box 7614; 6200 Winthrop Dr., 27612	2294	782-3765
Scarborough, Dr. C. Cayce, (Margaret), Prof. Emer., Agri'l. Educ. 2604 Barmettler St., 27607		
Scattergood, Dr. Ronald O., (Sue), Prof., Mat. Engr. 235 Riddick, Box 7907; 111 Kinnaird Ln., Cary 27511	7843	467-0078
Schaffer, Dianne M., (Henry E.), Comp. Prog., Dairy Rec. Proc. Ctr. Leazar, Box 7623; 4904 Liles Rd., 27606	7828	851-4497
Schaffer, Dr. Henry E., (Dianne), Asst. Prov., Acad. Comp., Prof., Gen. & Biomath.,	2516	851-4497
M-2 Hillsborough Bldg., Box 7109; 4904 Liles Rd., 27606		
Scharko, Dr. Pat B., Resid. Bovine Herd Health, SVM 4700 Hillsborough St., Box 8401	829-4200	
Schechter, Dr. Stephen, (Nancy), Assoc. Prof., Math. 349 Harrelson, Box 8205; 514 E. Lane St., 27601	2671	821-2200
Scheidt, Dr. Vicki J., Asst. Prof., Dermatology, Comp. Ani. & Sp. Species Med., SVM	829-4272	781-6048
4700 Hillsborough St., Box 8401; 4504 Chesborough Rd., 27612		
Schenk, Laura L., Sec., Univ. Stud. 145 Harrelson, Box 7107; 2315 McMullan Cir., 27608	2479	755-0255
Schetzina, Dr. Jan F., (Patricia), Prof., Physics 408 Cox, Box 8202; 510 Francisca Ln., Cary 27511	2515	467-0475
Schiller, Dorothy, Res. Tech., Anat., Physiol. Sci. & Radiol. SVM	829-4371	
4700 Hillsborough St., Box 8401		
Schindler, Dr. Anton, Adj. Prof., Text. Chem. RTI, P.O. Box 12194, Res. Tri. Pk., 27709; 3742 Bentley Dr., Durham 27709		489-2540
Schindler, Irene B., (Steve), Sec., Stud. Aff. Lower Level, Thompson Bldg., Box 7305; 905 W. Peace St., 27605	2457	828-2573
Schindler, Kathy O., (Wayne), Sec., Design 200 Brooks, Box 7701; 216 Poplar St., Cary 27511	2202	481-0056
Schlanz, John W., (Barbara), Min. Proc. Engr., Min. Res. Lab. 180 Coxe Ave., Asheville 28801		704-251-6155
135 Appalachian Way, Asheville 28806		704-253-0729
Schmidt, Joan K., (Bernard), Tech., Bot. 2203 Gardner	3600	
Schmidt, John D., Gen. Utility Wkr., Phys. Plant 4700 Hillsborough St., Box 8401; 303 Hawthorne Rd., 27605	829-4217	832-1450
Schmidt, Katheryn M., (Douglas), Supv., Clin. Path. Lab., Vet. Teach. Hosp., SVM	829-4200	782-5311
4700 Hillsborough St., Box 8401; 1522 Glen Eden Dr., 27612		
Schmitt, Dr. Donald P., (Mary Ann), Assoc. Prof., Plant Path. Plant Sci., USDA, 3127 Ligon St., Box 7631; 117 Ammons Dr., 27609	3905	847-5740
Schneeweis, Thomas J., Res. Asst., Microb. 4525 Gardner, Box 7615; 211 Woodburn Rd., 27605	7502	833-6096
Schneider, Dr. Sally M., Asst. Prof., USDA, Plant Path. Tob. Res. Lab., Rt. 2, P.O. Box 1555, Oxford 27565, Box 7616; 100-H Lakefront, 27612	693-5151	782-3532
Schoelkopf, Eileen M., (Allen), Clk.-Typ., Zool. 1634 Gardner, Box 7617; 6229 Lewisand Ct., 27615	2587	847-4864
Schoenherr, Dr. William D., (Jane), Asst. Prof., Ani. Sci. 203 Polk, Box 7621	2566	
Schrag, Dr. Robert L., (Susan), Assoc. Prof., Speech-Comm. 207 Winston, Box 8104; 3232 Oak Grove Cir., 27607	3247	787-4895
Schreck, Janice C., Sec., Microb. 4515 Gardner, Box 7615; P.O. Box 37083, 27627	2391	779-1894
Schreiner, Dr. Anton F., (Clara Lee), Prof., Chem. 732 Dabney, Box 8204; 402 Wilmot Dr., 27606	2993	851-1957
Schrimper, Dr. Ronald A., (Freddie), Prof., Ec. & Bus. 219H Hillsborough Bldg., Box 8110; 4229 Redington Dr., 27609	3886	782-0174

Name, Title, Department and Address	Office Phone	Resid. Phone
Schroeder, Carol G., (Albert Boyers), Placement Counselor, Career Plan. & Place.	2396	787-0045
28 Dabney, Box 7303; 3320 Boulder Ct., 27607		
Schubart, Pamela L., Readmissions Clk., Reg. & Rec.	2572	
100 Harris, Box 7313; 3939 Glenwood Ave., 27612		
Schulman, Barbara, Vis. Lect., Design	3260	
Leazar 201-A, Box 7701		
Schulman, Dr. Michael D., Assoc. Prof., Soc. & Anth.	2702	833-6512
325 1911 Bldg., Box 8107; 305 Furches. 27607		
Schultea, Dr. Thomas D., Vis. Instr., Anat., Physiol. Sci. & Radiol., SVM	829-4200	
4700 Hillsborough St., Box 8401		
Schultz, Dr. Arturo E., (Frances), Asst. Prof., Civil Engr.	2331	
Box 7908		
Schultz, Frankie J., (David Brauer), Res. Tech., Plant Path.	2721	493-5733
2417 Gardner, Box 7616; R.D. 7, Box 195, Erwin Rd., Durham 27707		
Schwartz, Dr. Steven J., (Elizabeth), Asst. Prof., Food Sci.	2959	469-8299
116-A Schaub, Box 7624; 415 Glen Bonnie Ln., Cary 27511		
Schwetz, Dr. Bernard A., Adj. Prof., Anat., Physiol. Sci. & Radiol., SVM		
Box 8401; NIEHS, Res. Tri. Pk.		
Scofield, Dr. Herbert T., (Maryon), Prof. Emer., Bot.		787-5345
1306 Banbury Rd., 27607		
Scott, Andre A., Info. Asst., Stu. Aff.	3164	
2100 Univ. Stu. Ctr., Box 7306; 1820-204 Avent Ridge Rd., 27606		
Scott, Bernadette M., Agri'l. Res. Tech., Hort. Sci. Ext.	2685	787-5342
Hort. Sci. Grnhse., Box 7609; 1427 Ridge Rd., 27607		
Scott, Christine, Hskp. Asst., Phys. Plant	3323	847-5167
Park Shops, Box 7219; Rt. 1, Box 381, 27614		
Scott, Harvey D., (Debbie), Boiler Oper., Phys. Plant	829-4216	494-2758
4700 Hillsborough St., Box 8401; Rt. 3, Box 79, Franklinton 27525		
Scott, John E., (Jeanette), Farm Supt., Hort. Sci.	3144	467-1658
Res. Unit 4, Box 7609; 407 Melody Ln., Cary 27511		
Scott, Katie D., Hskp. Asst., Phys. Plant	3323	833-3123
Park Shops, Box 7219; 805 East Lenoir St., 27610		
Scott, Lula E., Hskp. Asst., Phys. Plant	3323	847-5805
Park Shops, Box 7219; Rt. 1, Box 509, 27614		
Scott, Robin G., Agri'l. Res. Tech., Ani. Sci.	2504	
227 Polk, Box 7621; P.O. Box 33074, 27606-0074		
Scott, Ronald D., (Melody), Engr. Res. Tech., Bio. & Agri'l. Engr.	3121	362-5689
174 Weaver, Box 7625; Rt. 4, Box 272, Apex 27502		
Scott-Jones, Dr. Diane, (John), Asst. Prof., Psy.	2251	848-1516
761 Poe, Box 7801; 2505 Gatwick Ct., 27612		
Seaboch, Timothy R., Res. Tech., Bio. & Agri'l. Engr.	3101	828-4995
135 Weaver, Box 7625; 1205 Wake Forest Rd., 27604		
Seabrooks, Denise W., (Leroy C.), Clk.-Typ., Math., Audio Visual Tutorial Ctr.	3157	
244 Harrelson, Box 8205; 206 N. 4th St., Smithfield 27577		
Seagondollar, Dr. Lewis W., (Winifred), Prof., Physics	2515	787-5642
406-C Cox, Box 8202; 6853 W. Lake Anne Dr., 27612		
Seagraves, Dr. James A., Prof. Emer., Ec. & Bus.		215-345-7431
R.D. 4, Doylestown, PA 18901		
Seagraves, Vivian M., (Matthew Ray), Hskp. Supv., Phys. Plant	3323	779-6501
Park Shops, Box 7219; 5408 McCoy Rd., 27603		
Seagraves, Wayland P., (Reba), Assoc. Prof. Emer., Elec. Engr.		247-3320
Box 257, Salter Path 28575		
Seale, Jacqueline A., (Al), Clk.-Typ., Phyt.	2778, 2779	851-4305
2002 Gardner, Box 7618; 1436 Princess Anne Dr., 27607		
Seaman, Ed, Dir., Sports Info., Athl.	2102	829-9186
Case Athl. Ctr., Box 8501; 2300-J 7 Avent Ferry Rd., 27606		
Sears, Cynthia B., (Calvin), Acct. Clk., Int. Audit	3289	552-5858
B Holladay, Box 7202; 604 Dickens St., Fuquay-Varina 27526		
Sears, Gail, (Bob), Clk.-Typ., For. Lang.	2475	
120 1911 Bldg., Box 8106; 2240 Charles Dr., 27612		

Name, Title, Department and Address	Office Phone	Resid. Phone
Seastrunk, Cliff L., III, (Susan), Coord., Cont. Educ. Prog., Text. Ext.	3761	847-0508
226 Nelson, Box 8301; 8900 Wellsley Way, 27612		
Seate, Robert C., III, Libr. Clk., Circ.	3364	832-4399
Library, Box 7111; 2900-C Ligon St., 27607		
Seater, Dr. John J., (Susan), Prof., Ec. & Bus.	2472	848-3506
306-D Hillsborough Bldg., Box 8110; 5712 Edgedale Dr., 27612		
Seeger, Marie H., (Fred), Sec., Agri. & Life Sci.	3248	467-9845
107 Patterson, Box 7601; 619 Dorset Dr., Cary 27511		
Seegers, L. Walter, (Frances), Prof. Emer., Hist.	2485	832-6238
134 Harrelson; 2701 Mayview Rd., 27607		
Seely, J. Frank, (Lucille), Prof. Emer., Chem. Engr.	2324	832-3096
9 Riddick; 300 Brooks Ave., 27607		
Seitz, Robert A., (Barbara), Sr. Min. Engr. Min. Res. Lab.		
180 Coxe Ave., Asheville 28801		704-251-6155
724 Hollybrook Dr., Asheville 28803		704-274-3400
Self, Joanne J., (Ralph), Word Processor, Text.	3075	821-5973
B3B Nelson, Box 8301; 2346 Hathaway Rd., 27608		
Selgrade, Dr. James F., (Mary Jane), Assoc. Prof., Math.	3298	782-2007
134 Harrelson, Box 8205; 2905 Old Orchard, 27607		
Sellars, John W., Pers. Analyst, Human Resou.	7175	834-4561
Admn. Serv. Ctr., Box 7210; 2605 Albemarle Ave., 27610		
Sellers, Floyd S., (Violet), Sr. Safety Insp., Public Safety	7915	772-1488
Field House, Box 7220; 6018 Woodcrest Dr., 27603		
Sellett, Louis, Nuc. Med. Tech., Physiol. Sci. & Radiol., Vet. Teach. Hosp., SVM	829-4200	
4700 Hillsborough St., Box 8401		
Seltmann, Dr. Heinz, Prof., USDA-ARS, Bot	2726	
4215 Gardner, Box 7612		
Seneca, Dr. Ernest D., (Peggy), Prof. & Head, Bot.	2727, 2724	556-2247
2214 Gardner, Box 7612; Rt. 1, Box 38 B. Wake Forest 27587		
Senior, M. Lynn, (Mark), Agri'l. Res. Tech., Crop Sci.	3267	362-1170
4203 Williams, Box 7620; 8617 Cavatina Ct., Apex 27502		
Senter, David L., (Franki), Pest Exterm., Phys. Plant	3323	872-7603
Park Shops, Box 7219; 4612 Ryegate, 27604		
Senter, Franki B., (David), Acct. Tech., Payr. & Ben.	2151	872-7603
Admn. Serv. Ctr., Box 7215; 4612 Ryegate Dr., 27604		
Senter, Nancy M., Nurse, Health Serv.	2564	467-3049
Clark Inf., Box 7304; 306 Two Creek Dr., Cary 27511		
Serow, Dr. Robert C., Assoc. Prof., Educ'l. Ldrship. & Prog. Eval.	3127	781-7308
608-H Poe, Box 7801; 4309 Windsor Pl., 27609		
Serxner, Shoshana, Acct. Clk., Text.	2439	834-9406
B3 Nelson, Box 8301; 705 Dixie Tr., 27607		
Sessom, Beverly G., Hskp. Asst., Phys. Plant	3323	478-3952
Park Shops, Box 7219; P.O. Box 352, Spring Hope 27882		
Setser, David, HVAC Apprentice, Phys. Plant	3080	821-5080
Armory, Box 7219; 51B Phelps Ave., 27607		
Setzer, Dr. C. John, (Betty), Assoc. Head, Chem. Engr.	2317	489-2195
216 Riddick, Box 7905; 3105 Buckingham Rd., Durham 27707		
Setzer, Thomas V., (Emily), Book Div. Mgr., Book Dept.	3117	876-2458
SSS, Box 7224; 3713 Huntleigh Dr., 27604		
Severin, Laura R., Lect., Engl.	3863	493-1243
281 Tompkins, Box 8105; 1800 Williamsburg Rd., 24C, Durham 27707		
Severt, Basil L., Agri'l. Res. Tech., Ani. Sci.	2674	772-8148
3720 Lake Wheeler Rd., Unit 2, Box 7621; 8420 Camellia St., 27603		
Shadding, Tammy L., Food Serv. Supv., Univ. Dining	3963	834-4562
Dining Hall, Box 7307; 320-D Dacian Rd., 27610		
Shafer, Dr. Steven R., (Gay), Asst. Prof.-USDA, Plant Path. & Soil Sci.	2142	469-8882
840 Method Rd., Unit II, Box 7628; 410 Applecross Dr., Cary, 27511		
Shaffran, Anne K., Lect., Engl.	3870	
232 Tompkins, Box 8105; 133-H Hunt Club Ln., 27606		
Shannon, Henry A., Assoc. Prof. Emer., Math. & Sci. Educ.	2238	772-3402
326 Poe, Box 7801; 1102 Poplar Ave., Garner 27529		
Shannon, Jack L., Assoc. Prof., Phys. Educ.	2486	467-0524
2005 Carmichael, Box 8111; 207 Esquire Ln., Cary, 27511		

Name, Title, Department and Address	Office Phone	Resid. Phone
Shannon, Ruby B., Nurse Supv., Health Serv. Clark Inf., Box 7304; 366 Wilmot Dr., 27606	2564	851-2241
Sharp, Stephen L., APMS, Mil. Sci. 154 Reynolds Coliseum, Box 7309	2428	
Sharpe, L. Carol, Sec., Engl. 246 Tompkins, Box 8105; 606 E. Garner Rd., Garner 27529	3854	772-0461
Sharpe, Mary R., Food Serv. Asst., Univ. Dining Dining Hall, Box 7307; 101 Idlewild Ave., 27604	3963	
Sharpe, William, Methodist Chaplain, Coop. Camps Min. 2501 Clark Ave., 27607; 107 Bogue Ct., Cary 27511	833-1861	467-0704
Shattuck, Bonnie C., Clk., Athl. Reynolds Coliseum, Box 8503; Rt. 4, Box 201-A, Fuquay-Varina 27526	2106	
Shattuck, Wesley J., Sgt., Public Safety Field House, Box 7220	3206	
Shaw, Graye J., (Charles), Lab. Supv., Chem. 416 Withers, Box 8204; P.O. Box 12081, 27605	2537	828-6720
Shaw, Jackie, Hskp. Asst., Phys. Plant Park Shops, Box 7219	3323	
Shaw, Dr. Morton R., (Ruth), Prof. & Dean Emer., Text. 5509 Lambshire Dr., 27612		787-0916
Shea, W. Michael, (Myrtle), Asst. Prof. Emer., Phys. Educ. 2705 Royster Rd., 27608		787-9684
Shearer, Dr. Michael, Assoc. Prof., Math. 327 Harrelson, Box 8205; 2307 Prince St., Durham 27707	3298	489-9854
Shearin, Karen L., Clk.-Steno., Urban Aff. 288 McKimmon, Box 7401; 806 Lawndale St., Apt. 1, Garner 27529	2578	779-1756
Shearon, Dr. Ronald W., (Carolyn), Prof. & Assoc. Head, Adult & Comm. Coll. Educ. 310 Poe, Box 7801; P.O. Box 24, Rolesville 27571	3590	556-4398
Sheets, Dr. Thomas J., (Marie), Prof., Ent., Crop Sci. & Hort. 3709 Hillsborough St., Box 8604; 1518 Delmont Dr., 27606	3391	851-5267
Sheldon, Bonnie, (Brian), Agri'l. Res. Tech., Crop Sci. 4205 Williams, Box 7620; 7509 Chippenham Ct., 27612	3267	847-7917
Sheldon, Dr. Brian W., (Bonnie), Asst. Prof., Food. Sci. 218 Schaub, Box 7624; 7509 Chippenham Court, 27612	2968	847-7917
Shell, Dora M., Spec., Con. Educ. & Professional Dev. 147-C McKimmon, Box 7401; 1310-204 Park Glen Dr., 27610	2261	831-9233
Shelton, Dr. James E., (Ann), Assoc. Prof., Soil Sci. 2016 Fanning Bridge Rd., Fletcher 28732-9628		704-684-3562
Box 913, Hendersonville 28739		704-692-7680
Shepherd, Judy W., (Aubrey W.), Sys. Clk., Purch. & Stores 216 Alumni, Box 7212; 5209 Fireside Dr., 27609	2171	876-2561
Sherertz, Hamilton, Elect. Tech., Comp. Ctr. 109 Hillsborough Bldg., Box 7109; 2700 Van Dyke Ave., 27607	2517	828-9941
Sheridan, Dick, (Brenda), Head Football Coach, Athl. Weisiger-Brown Ath. Fac., Box 8502	2114	
Sherrill, Rebecca N. (Jesse), Bkpr., Adult & Comm. Coll. Educ. 111 Ricks, Box 7607; 6900 Woodmere Dr., 27612	2707	848-3715
Sherwood, Charles E., (Mitzi), Res. Mech., Bio. & Agri'l. Engr. 130 Weaver, Box 7625; P. O. Box 33033, 27606	3101	828-8930
Shew, Dr. Barbara B., (David), Res. Assoc., Crop Sci. 840 Method Rd., Unit 3, Box 7629; 104 Eagles Nest, Cary 27511	3281	467-0779
Shew, Dr. H. David, (Barbara), Asst. Prof., Plant Path. 2411 Gardner, Box 7616; 104 Eagles Nest, Cary 27511	2721	467-0779
Shields, Glenda B. (Rick), Ben. Counselor. Admn. Serv. Ctr. Box 7215; 1209 Beverly Dr., 27610	2151	828-5969
Shields, Linda E., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 1441-H Sawyer Rd., 27610	3323	828-6808
Shields, Lola, Typ., Phys. Educ. 2011 Carmichael, Box 8111; 1509 Princess Anne Dr., 27607	2487, 2488	851-3675
Shields, Roderick S., (Glenda), Proj. Supv., Urb. Aff. 276 McKimmon, Box 7401; 1209 Beverly Dr., 27610	3211	828-5969
Shih, Dr. Jason C. H., (Jane), Assoc. Prof., Poul. Sci. 109 Scott, Box 7608; 1025 Sturdivant Dr., Cary 27511	2623	467-7537

Name, Title, Department and Address	Office Phone	Resid. Phone
Shipp, Kimberly D., Clk.-Recept., Grad. Sch. 104 Peele, Box 7102; 5317 Monk Dr., 27603	2871	779-6499
Shoemaker, Dr. Paul B., (Simone), Prof. & Ext. Plant Path. Spec., Mt. Hort. Crops Res. Sta., 2016 Fanning Bridge Rd., Fletcher 28732-9628		704-684-3562 704-891-4968
Rt. 2, Box 48-C, Horse Shoe 28742	2204, 2206	833-4140
Shogren, Vernon, Prof., Arch. 310B Brooks, Box 7701; 2200 Hope St., 27607		
Shokey, Becky, Sec., Ani. Sci. 516 Test Farm Rd., Waynesville 28786		704-456-7520 704-648-6554
Rt. 4, Box 319, Canton 28716		
Shore, Dr. Thomas C., Jr., (Nell), Asst. Prof. Emer., Occup. Educ.	2234	787-2440
725 Poe, Box 7801; 3417 Fairhill Dr., 27612		
Shouse, Meg R., Clk.-Typ., Accts. Pay. 213 Admn. Serv. Ctr., Box 7204	2139	
Showers, Dr. William J., (Dru), Asst. Prof., Mar., Earth & Atmos. Sci.	7143	481-1252
144 Withers, Box 8208; 1313 Rothes Rd., Cary 27511		
Shue, Elizabeth W., (Norman), Sec., Hort. Sci.	3131	772-2930
120 Kilgore, Box 7609; 404 Butler Dr., Garner 27529		
Shultz, Ruth T., (Merl), Sec., Agri. & Life Sci. 112 Patterson, Box 7601; 911 Ransdell Rd., Fuquay-Varina 27526	2641	552-9265
Shuman, Dr. Ruth M., (James), Asst. Prof., Poul. Sci.	2628	846-0678
9B Scott, Box 7608; 712 Hunting Ridge Rd., 27609		
Siderelis, Dr. Chrystos D., (Karen), Prof., Rec. Resou. Admin.	3276	
4008M Biltmore, Box 8004; 1609 Carson St., 27608		
Siewert, Dr. Charles E., (Sally), Prof., Math. 213 Harrelson, Box 8205; 4010 Camelot Dr., 27609	3177	782-5538
Sigmon, Mary C., (Al), Acct. Supv., Acct. Dept., SSS SSS, Box 7224; 1513 Ashburton Rd., 27606	2161	851-0095
Sigvaldsen, Jean T., (Gary), Lab. Supv., Chem.	2537	467-1054
314 Withers, Box 8204; 105 Flora MacDonald Ln., Cary 27511		
Sikes, Mary W., Lect., Math. 344 Harrelson, Box 8205; 2721 Royster Rd., 27608	2281	781-1209
Sikoski, Edward (Ed), P., (Sandi), Dir., Purch. & Stores 214 Alumni, Box 7212; 204 Gordon St., Cary 27511	2171	481-2237
Silber, Dr. Robert, Assoc. Prof., Math. 347 Harrelson, Box 8205; 1205 Southerland Rd., Garner 27529	2281	779-1606
Siler, Mary W., (Buddy), Sec., Ext. Ec. & Bus. 210 Patterson, Box 8109; 5323 Olive Rd., 27606	3107	851-9652
Siliski, Vickie F., Asst. to the Dir. of Univ. Dining, Univ. Dining.	2021	467-7132
3101 Univ. Stu. Ctr., Box 7307; 106 Smallwood Ct., Cary 27511		
Silverberg, Dr. Larry M., Asst. Prof., Mech. & Aero. Engr. 2406 Broughton, Box 7910; 4108 Deephollow 179, 27612	2365	781-6137
Silverstein, Hava, Prog., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 125 Trappers Run Dr., Cary 27511	829-4215	469-2210
Silverstein, Dr. Jack W., (Hava), Assoc. Prof., Math. 218 Harrelson, Box 8205; 125 Trappers Run Dr., Cary 27511	7864	469-2210
Simmons, Barrett, Food Serv. Asst., Univ. Dining Dining Hall, Box 7307	3963	
Simmons, Bobby, Hskp., Stu. Aff. Craft Ctr., Thompson Bldg., Box 7305; 3106 Woodpecker, 27610	2457	833-1522
Simmons, Connelly G., (Susan), Res. Asst., Urban Aff. 282 McKimmon, Box 7401; 1201-F Village Greenway, Cary 27511	3211	469-2511
Simmons, Dr. Donald G., (Cheryl Stroud), Prof., Microb., Path., & Parasit., SVM 4700 Hillsborough St., Box 8401; Rt. 3, Box 212A, Apex 27502	829-4200	362-8054
Simmons, Naomi, Stock Clk., Phys. Educ. 1214 Carmichael, Box 8111; 6135 Jeffrey Grove, 27612	3508	781-7050
Simmons, Vickie J., (Carl), Word Processor, Text. B3B Nelson, Box 8301; 116 Hillcrest Rd., 27605	3075	834-3023
Simmons, William J., Painter, Phys. Plant Park Shops, Box 7219; 6139 Jeffrey Grove Rd., 27612	3323	781-7050

Name, Title, Department and Address	Office Phone	Resid. Phone
Simms, H. Pearl, (Claude), Clk., Dean's Off., Hum. & Soc. Sci.	3756	
G 113 Winston, Box 8101; 1228 Beverly Dr., 27610		
Simon, Joe S., Whse. Clk., Phys. Plant	3256	821-3886
20 Riddick Stad., Box 7219; 1131-A Carlton Ave., 27606		
Simonsen, Ingeborg K., (Sofus), Res. Asst., Engr. Res. Serv. Div.	2349	787-8074
3146 Burlington, Box 7903; 4213 Arbutus Dr., 27612		
Simonsen, Dr. Sofus E., (Ingeborg), Assoc. Prof. and Scheduling Off., For. Lang.	2475	787-8074
129 1911 Bldg., Box 8106; 4213 Arbutus Dr., 27612		
Simpson, Bill G., Spec., IES	2358	685-4178
215-H Page, Box 7902; P.O. Box 129, Julian 27283		
Simpson, Cleveland, (Jereline), Col. Commander, AFROTC	2417	
145 Reynolds Coliseum, Box 7308		
Simpson, M. Ronald, (Olga), Head, Tech. Info. Ctr.	2830	782-3818
1129 Library, Box 7111; 5401 Cedarwood Dr., 27609		
Simpson, Pearl K., Sec., Text.	3485	832-3774
126 Nelson, Box 8301; 102 Dixie Tr., 27607		
Simpson, William H., (Edith), Sec. of the Univ., Chan. Off.	2200	832-7394
A Holladay, Box 7001; 3013 Mayview Rd., 27607		
Sims, David L., (Carol), Capt., AFROTC	2417	
145 Reynolds Coliseum, Box 7308		
Sims, Dr. Leslie B., (Betty J.), Assoc. Dean, Res. & Prof., Chem., Phys. & Math. Sci.	7865	781-4575
113 Cox, Box 8201; 3461 Leonard St., 27607		
Sinclair, Frederick E., (Becky), Plumber, Phys. Plant.	829-4217	832-8984
4700 Hillsborough St., Box 8401; 1129 Culpepper Ln., 27610		
Singer, Dr. Michael F., Prof., Math.	2671	781-6762
348 Harrelson, Box 8205; 2120 Cowper Dr., 27608		
Singh, Dr. Phirtu, (Jayanti), Dir., X-Ray Crystallography Lab., Chem.	2942	967-5847
518-A Dabney, Box 8204; 105 Lilac Dr., Carrboro 27510		
Singleton, Blanche B., Hskp. Asst., Phys. Plant	3323	828-3716
Park Shops, Box 7219; 2136 Mayview Rd., 27607		
Singleton, John A., (Rebecca), Res. Chemist, USDA, Bio. & Agri'l. Engr.	3121	772-2517
280 Weaver, Box 7625; Rt. 1, Box 196, Apex 27502		
Sinn, Judith P., (Daryl), Agri'l. Res. Tech., Plant Path.	2751	779-6463
3405 Gardner, Box 7616; 3811 Cobb St., Garner 27529		
Siopes, Dr. Thomas D., (Linda), Assoc. Prof., Poul. Sci.	2623	782-3465
101-A Scott, Box 7608; 2104 Lynn Rd., 27612		
Sisco, Dr. Paul H., Asst. Prof., USDA, Crop Sci.	2704	847-4311
1250 Williams, Box 7620; 6515 English Oaks Dr., 27609		
Sisler, Dr. Edward C., Prof., Biochem.	2581	779-6692
23 Polk, Box 7622; 3828 Vesta Dr., 27603		
Sisson, Dr. Verne A., (Sue), Asst. Prof., Crop Sci.	693-5151	847-6335
Tob. Res. Lab., Rt. 2, Box 16G, Oxford, 27565; 301 Trotters Ridge Dr., 27614		
Skadsen, Dr. Ronald W., (Mary), Res. Assoc., Gen.	2294	851-3812
3632 Gardner, Box 7614; 1228 Gorman C, 27606		
Skaggs, Dr. R. Wayne, (Judy), Prof., Bio. & Agri'l. Engr.	3121	782-3816
150 Weaver, Box 7625; 2824 Sandia Dr., 27607		
Skender, Charles J., (Mary Anne), Lect., Ec. & Bus.	2472	471-4208
308A Hillsborough Bldg., Box 8110; 6017 Russell Rd., Durham 27712		
Skinner, Douglas W., (Evelyn), Sys. Analyst, Admn. Comp. Serv.	3640	471-3094
1212 Blue Ridge Rd., Box 7227; 1102 Cabin Creek Rd., Durham 27712		
Skroch, Dr. Walter A., (Judy), Prof., Hort. Sci.	3322	787-3814
166 Kilgore, Box 7609; 5400 Farley Dr., 27609		
Slade, David E., (Lynn), Res. Tech., Plant Path.	2735	859-3549
2604 Gardner, Box 7616; 6038 Iona Pl., 27606		
Slate, Andrew B., (Marcia), Agri'l. Engr., Bio. & Agri'l. Engr.	3101	266-1098
136 Weaver, Box 7625; Rt. 12, Box 125-E, 27610		
Slatka, Dr. Richard W., (Maxine Atkinson), Assoc. Prof., Hist.	3371, 7908	781-3181
127 Harrelson, Box 8108; 3304 Dell Dr., 27609		
Sledge, Diane D., (John M.), Sec., Info. Serv.	3470	365-7993
219 Oberlin Rd., Box 7504; Rt. 4, Box 337, Wendell 27591		

Name, Title, Department and Address	Office Phone	Resid. Phone
Sledge, John M., (Diane D.), Agri'l. Res. Tech., Plant Path. 1515 Gardner, Box 7616; Rt. 4, Box 337, Wendell 27591	2735	365-7993
Sleva, Dolores A., (Stan), Clk. Recept., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 5010 Tremont Dr., 27609	829-4200	876-2213
Sloan, Crystal M., (Robert), Food Serv. Asst., Univ. Dining Dining Hall, Box 7307; 308 Winston Dr., Cary 27511	3963	467-4241
Sloan, Jackie Burrell, (Herbert), Acct. Tech., Housing 207 Harris, Box 7315	2410	
Sloan, Robert W., Gen. Utility Wkr., Phys. Plant Armory, Box 7219	3080	
Small, Dr. Judv Jo. (A. Thomas), Lect., Engl. 207 Tompkins, Box 8105; 2625 Van Dyke Ave., 27607	3863	832-2473
Small, Kozie, Sec., Educ. Serv., UNC Ctr. for Public TV 217 TV Ctr., Box 8601	3604, 3607	
Small, S. Douglas, Jr., (Carrie), Assoc. Dir., SSS SSS, Box 7224; 1926 Sunset Dr., 27608	2161	829-1268
Smallwood, Charles, Jr., (Judy), Prof. Emer., Civil Engr. 416 Mann, Box 7908; 305 Transylvania Ave., 27609	2331	787-2225
Smallwood, Dr. James E., Prof., Anat., Physiol. & Radiol., SVM 4700 Hillsborough St., Box 8401; 6329 Donnybrook, 27606	829-4223	833-2131
Smearman, Cindy L., Libr. Technical Asst., Monographic Cat. 1121 Library, Box 7111; 312 Pogue St., 27607	2603	834-3626
Smetana, Dr. Frederick O., (Adelaide), Prof., Mech. & Aero. Engr. 2404 Broughton; 5425 Parkwood Dr., 27612	2365	787-2743
Smith, Alex W., Carpenter Supv., Phys. Plant Park Shops, Box 7219; 527 S. East St., 27601	3323	833-7784
Smith, Alton L., (Linda B.), Maint. Asst., Univ. Stu. Ctr. B102 Univ. Stu. Ctr., Box 7306; 3700 Nancy Ln., 27604	3340	876-1727
Smith, Andrew W., Frat. Court Mgr., Stu. Dev. 214 Harris, Box 7314; 100 S. Fraternity Court, 27606	2441	834-5898
Smith, Anita W., (Garry), Typ., Physics 106 Cox, Box 8202; P.O. Box 184, Willow Springs 27592	2521	
Smith, Anona P., Coord., Recruitment, Educ. 225 Poe, Box 7801	2231	
Smith, Bobby, (Alma W. Burt), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 1007 Richardson Dr., 27612	3323	821-5136
Smith, Bobby A., Hskp. Asst., Phys. Plant Park Shops, Box 7219; P.O. Box 1009, Spring Hope 27882	3323	478-5170
Smith, Burl H., (Joan), Engr. Tech., Phys. Plant 4-A Morris, Box 7219; 2207 Noble Rd., 27608	2184	834-6150
Smith, Dr. Carl Brent, (Nella), Assoc. Prof., Text. Chem. 109 David Clark Labs, Box 8302; 2610 Glen Burnie Dr., 27607	2551	781-1004
Smith, Carol C., Sec., Ec. & Bus. 218-A Hillsborough Bldg., Box 8110	3886	832-9348
Smith, Catherine H., (Richard), Clk.-Steno., Poul. Sci. 11 Scott, Box 7608; 204 Merwin Rd., 27606	2628	851-4769
Smith, Dr. Charles E., (Ai Li), Asst. Prof., Biomath. & Stat. 513-A Cox, Box 8203; 112 Mayodan Dr., Cary 27511	2271	467-8426
Smith, Charles E., Plumber, Phys. Plant Armory Shop, Box 7219; Rt. 7, Box 178, Apex 27502	3080	362-5988
Smith, Charlie, (Florence), Mach. Oper., Phys. Plant 18 Riddick Stad., Box 7219; Rt. 7, Box 178, Apex 27502	3479	362-5988
Smith, Cindy S., (Lloyd), Res. Tech., SVM 4700 Hillsborough St., Box 8401; 620 Buckhorn Rd., Sanford, 27330	829-4367	258-3413
Smith, Clarence L., Jr., Asst. Dept. Head, Ind. Engr. 334 Riddick, Box 7906; 6401 Rushingbrook Dr., 27612	2362	848-0898
Smith, Dr. Clyde F., (Crystle), Prof. Emer., Ent. Turner House; 2716 Rosedale Ave., 27607	3016	832-3396
Smith, Dennis R., (Louise), Int. Auditor, Int. Audit B Holladay, Box 7202; 6505 Orchard Knoll Dr., Apex 27502	3289	362-8930
Smith, Dr. Donald E., (Lillian), Prof., Zool. 1607 Gardner, Box 7617; Queensferry Rd., Cary 27511	2593	467-6592

Name, Title, Department and Address	Office Phone	Resid. Phone
Smith, Elnora P., Baker, Univ. Dining .....2021 Univ. Stu. Ctr. Bakery, Box 7307; 107-32 Rt. 4, Zebulon, 27591		
Smith, Emelyn V., Lect., Phys. Educ. ....3161 2012 Carmichael, Box 8111; 8200 Creedmoor Rd., 27612		848-3585
Smith, Dr. Farmer S., (Frances), Assoc. Prof. Emer., Ind. Engr. ....2241 Poe; 5012 Brookhaven Dr., 27612		787-1716
Smith, Dr. Frank H., (Lois), Prof. Emer., Ani. Sci. ....2773 324 Polk, Box 7621; 2506 Stafford Ave., 27607		832-6798
Smith, Dr. Frank J., (Peggy), Assoc. Prof., Psy. ....2254 714-A Poe, Box 7801; 810 Chamberlain St.		781-3034
Smith, Dr. Gary W., (Martha), Asst. Prof., Text. Mgmt. & Tech. ....3890 133 Nelson, Box 8301; 10812 Martha's Way, 27614		847-3135
Smith, Dr. Gilbert G., (Dana Bartelt), Prof. & Coord. Lang. Festival, For. Lang. ....2475 135 1911 Bldg., Box 8106; 117 Woodburn Rd., 27605		834-6533
Smith, Dr. Henry B., (Virginia), Dean Emer., Engr. Res. Progs. ....2345 224 Page, Box 7903; 3405 Caldwell Dr., 27607		787-5499
Smith, Horace E., Gen. Utility Wkr., Phys. Plant ....3408 Sullivan Dr., Box 7219; Rt. 2, Box 82, Wake Forest 27687		556-1191
Smith, Dr. J. C., (Lois O.), Assoc. Prof., Civil Engr. ....2331 420 Mann, Box 7908; 1305 Kingston Ridge Dr., Cary 27511		467-1465
Smith, Dr. John David, Asst. Prof., Hist. ....2483 128 Harrelson, Box 8108; 2803 O'Berry St., 27607		821-4606
Smith, Joy M., Res. Tech., Soil Sci. ....2388 3203 Williams, Box 7619; Rt. 1, Box 106, Wendell 27591		365-4973
Smith, Joyce P., (Bill), Sec., Grad. Sch. ....2871 104 Peele, Box 7102; 106 Dean Pl., Knightdale 27545		266-2987
Smith, Kirby, Gen. Utility Wkr., Phys. Plant ....3408 Sullivan Dr., Box 7219; P.O. Box 1009, Spring Hope 27882		478-5149
Smith, Larry P., (Sheila), Tech., Rad. Prot. ....2894 214 Clark Labs, Box 7108; Rt. 3, Box 485, Benson 27504		894-5463
Smith, Lathan F., Jr., (Frances), Assoc. Prof., District Prog. Ldr., Agri'l. Ext. Serv. ....2380 300 Ricks, Box 7602; 3724 Eakley Ct., 27606		851-8631
Smith, Lee, (Hal Crowther), Assoc. Prof., Engl. ....3870 268 Tompkins, Box 8105; 44 Cedar St., Chapel Hill 27514		968-0566
Smith, Leo L., Carpenter, Phys. Plant ....3323 Park Shops, Box 7219; 1407 Kelly Road, Garner 27529		772-2421
Smith, Linda A., Asst. Prof., Soc. Work Prog., Soc. & Anth. ....3291 Box 8107		
Smith, Lloyd A., (Cindy), Res. Tech., Food Ani. & Equ. Med., SVM .....829-4200 4700 Hillsborough St., Box 8401; 620 Buckhorn Rd., Sanford 27330		258-3413
Smith, Luther A., (Marjo), Res. Assoc., Acid Depos. Prog., For. ....3520 1509 Varsity Dr., Box 7632; L-21 Coloney Apt., Chapel Hill 27514		967-9321
Smith, Lynnette D., (Cliff), Sec., Agri'l. Comm. ....3971 2318 Library, Box 7111; 13 Maiden Ln., 1, 27607		828-5460
Smith, Mark D., Res. Asst., For. ....3566 103 Enterprise St., Box 8006; 1602 Burnley Dr., Cary 27511		362-8399
Smith, Martha L., (Dennis), Clerical Supv., Agri'l. Comm. ....3737 213 Ricks, Box 7603; 6505 Orchard Knoll Dr., Apex 27502		362-8930
Smith, Martha M., (Harold), Pers. Asst., Agri. & Life Sci. ....2641 112 Patterson, Box 7601; 6300 Arrington Rd., 27607		851-0490
Smith, Mary E., Hskp. Asst., Phys. Plant ....3323 Park Shops, Box 7219		772-0184
Smith, Mary L., Hskp. Asst., Phys. Plant ....3323 Park Shops, Box 7219; 854 S. Haywood St., 27601		
Smith, Michael T., (Sarah K.), Telcomm. Spec., Admn. Comp. Serv. ....2794 B21 Hillsborough Bldg., Box 7209; 3808 Boddie Dr., 27609		872-3534
Smith, Nathaniel W., III, (Nanci), Res. Asst., Zool. ....2741 2103 Gardner, Box 7617; 2106 Reaves Dr., 27608		828-5027
Smith, Norwood G., Assoc. Prof., Engl. ....3863 209 Tompkins, Box 8105; 2949 Wycliff Rd., 27607		782-3826
Smith, Novella V., (Larry), Hskp. Asst., Phys. Plant ....3323 Park Shops, Box 7219; 146 West Barbee St., Zebulon 27597		269-4428

Name, Title, Department and Address	Office Phone	Resid. Phone
Smith, Percy G., (Almetrice), Dairy Plant Oper., Food Sci.	2760	965-5187
12 Schaub, Box 7624; Rt. 1, Box 765, Selma 27576		
Smith, Ralph, Jr., (Catherine), Hskp. Asst., Phys. Plant	3323	833-8831
Park Shops, Box 7219; 2901 Warren Ave., 27610		
Smith, Ray F., (Mary), Gen. Utility Wkr., Phys. Plant	3479	832-7440
18 Riddick Stad., Box 7219; C-11 Washington Terr.		
Smith, Rex R., Lect., Phys. Educ.	2487	362-4687
2045 Carmichael, Box 8111; 104 Loch Lomond Cir., Cary 27511		
Smith, Richard L., Mach. Oper., Phys. Plant	3800	828-2119
Recla. Ctr., Box 7219; 123 Camden St., 27601		
Smith, Robert E., Clk., Print Shop, Con. Educ.	3692	828-6139
138 McKimmon, Box 7401; 2825-D Conifer Dr., 27606		
Smith, Sara B., Sec., USDA-ARS Boll Weevil Eradication Res.	3560	782-3682
4116 Reedy Creek Rd., 27607; 2901 Augusta Ct., 27607		
Smith, Sharon U., (John), Data Entry Oper., Comp. Ctr.	2517	467-4935
108 Hillsborough Bldg., Box 7109; 6145 Loch Laurel Ln., 27612		
Smith, Sibyl S., (Joseph), Clk.-Typ., Chem.	2941	833-9227
525 Dabney, Box 8204; 2208 Shannon St., 27610		
Smith, Steve M., Food Serv. Asst., Univ. Dining	3963	
Dining Hall, Box 7307		
Smith, Dr. W. David, (Mary Lou), Crop Sci. Ext. Spec. & Asst. Prof., Crop. Sci.	3331	846-8226
4222 Williams, Box 7620; 6560 English Oaks, 27609		
Smith, Wendy B., Med. Rec. Asst., Vet. Teach. Hosp., SVM	829-4200	478-5993
4700 Hillsborough St., Box 8401; Rt. 2, Box 373, Spring Hope 27882		
Smith, Dr. William A., Jr., Prof., Ind. Engr.	2362	846-7752
338 Riddick, Box 7906; 279 Tan Tara Square, 27609		
Smith, William B., Locksmith, Phys. Plant	3323	772-7686
8 Park Shops, Box 7219; Box 112, Ackerman Rd., 27529		
Smith, William D., Lect., For.	2891	851-2361
2022A Biltmore, Box 8002; 1113-2C Craborchard Dr., 27606		
Smith, William E., (Robbie), Prof. Emer., Text.	8301	552-2729
120 Nelson, Box 8301; P.O. Box 845, Fuquay-Varina 27526		
Smith, Dr. William E., (Emelyn), Prof. Emer., Rec. Resou. Admin.		782-1916
Box 8004; 2611 Kittrell Dr., 27608		
Smith, Willie M., (Al), Sec., Dean's Off., Educ.	2231	755-0443
208 Poe, Box 7801; 809 Carlisle St., 27610		
Smithen, Bernadette I., Clk.-Typ., Micro., Path. & Parasit., SVM	829-4200	365-4375
4700 Hillsborough St., Box 8401; P.O. Box 1178, 45 N. Buffalo St., Apt. B, Wendell 27591		
Smolen, Dr. Michael D., (Carol Sword), Vis. Assoc Prof., Bio. & Agri'l. Engr.	3723	266-1216
622 Downtown Blvd., Box 7625; Rt. 5, Box 179, 27604		
Smyth, Dr. Thomas J., (Janella), Asst. Prof., Soil Sci.	2388	467-3827
3127 Williams, Box 7619; 1635 Kildonan Pl., Cary 27511		
Snakenburg, John S., (Sandy), Elect. Tech., Physics	2521	781-4124
302 Cox; 3642 Mill Run, 27612		
Snakenburg, Sandra T., Budg. Clk., Hort. Sci.	3668	851-6872
122 Kilgore, Box 7609; 219 Wilmot Dr., 27606		
Snavely, Richard F., (Dorothy), Prod.-Dir., UNC Ctr. for Pub. TV	2853	833-9246
208 TV Ctr., Box 8601; 413 Quail Dr., 27604		
Sneed, Dr. Ronald E., (Shelba), Prof., Bio. & Agri'l. Engr	2675	782-3808
211 Weaver, Box 7625; 3405 Malibu Dr., 27607		
Snelling, Layne K., (Martha Kaye), Agri'l. Res. Tech., Hort. Sci.	3346	469-3670
59 Kilgore, Box 7609; 705 Griffis St., Cary 27511		
Snipes, Jeffery W., (Kim), Asst. Football Coach, Athl.	2619	859-0571
Weisiger-Brown Athl. Fac., Box 8502; 1029 Avent Hill, Apt. A-7, 27606		
Snow, James H., Floor Maint. Supv., Phys. Plant	3323	832-3864
Park Shops, Box 7219; 2120 May View Rd., 27608		
Snow, Myra M., (Paul), Asst. Workshop Coord., IES	2356	
21 Page, Box 7902; 625-312 Cardinal Gibbons Dr., 27606		
Snow, Nancy H., (A. C.), Asst. Prof., Speech-Comm.	2450	787-2695
217 Winston, Box 8104; 4900 Morehead Dr., 27612		

Name, Title, Department and Address	Office Phone	Resid. Phone
Snow, Paul, Res. Asst., Poul. Sci.	3446	839-8272
Univ. Res. Farm 2, Box 7608; 625-312 Cardinal Gibbons Dr., 27606		
Snyder, Bonnie B., (Kenneth), Sec., Crop Sci. Ext.	3331	266-5471
4210 Williams, Box 7620; 305 Colchester Dr., Knightdale 27545		
Snyder, Kenneth M., (Bonnie B.), Farm Supt., Univ. Res. Unit 2	2759	266-5471
3720 Lake Wheeler Rd., Box 7601; 305 Colchester Dr., Knightdale 27545		
Snyder, Kerry G., Electronics Tech., Bio. & Agri'l. Engr.	3101	449-6012
123-A Weaver, Box 7625; 709 Alamance St., Gibsonville 27249		
Snyder, Dr. Patricia M., (Karl), Res. Assoc., Comp. Sci.	7938	485-4530
204 Daniels, Box 8206; 3111 Ravenhill Dr., Fayetteville 28303		
Snyder, Dr. Samuel S., (Barbara), Assoc. Prof., Psy.	2254	469-3055
755 Poe, Box 7801; 219 Clancy Cir., Cary 27511		
Snyder, Dr. Wesley E., (Rosalyn), Assoc. Prof., Elec. & Comp. Engr.	2336	851-1433
309 Daniels, Box 7911; 3603 Octavia St., 27606		
Soloman, Barbara A., Assoc. Coord., Advising for Univ. Undesignated		
Freshmen, Acad. Skills Prog.	3592	556-3111
528 Poe, Box 7105; Rt. 3, Wake Forest 27587		
Solomon, Dr. Daniel L., (Carolyn), Prof. & Head, Stat.	2420	781-6930
110-A Cox, Box 8203; 5016 Hermitage Dr., 27612		
Sonner, William H., Assoc. Prof., Phys. Educ.	2487	847-8244
2023 Carmichael, Box 8111; 7201 Woods Edge Ct., 27609		
Soper, Rebecca J., (Dan), Vis. Lect., Speech-Comm.	2450	848-4576
203-A Winston, Box 8104; 308 Woodcock Cir., 27609		
Sorensen, Dr. Kenneth A., (Joyce), Prof., Ent.	3140	362-6617
1103 Grinnells, Box 7626; 5316 Dutchman Dr., 27606		
Soroos, Dr. Marvin S., (Carol), Prof. & Head, Pol. Sci. & Pub. Admin.	2481	787-5150
215 Link Bldg., Box 8102; 2876 Wycliff Rd., 27607		
Sorrell, Dr. F. Yates, Prof., Mech. & Aero. Engr.	3024	851-4200
3190 Broughton, Box 7910; 1925 Trexler Ct., 27606		
Sorrell, Glenn L., HVAC Mech., Phys. Plant	3080	779-1420
Armory, Box 7219; 4723 Forestdale Rd., 27603		
Sortini, Dianne M., Empl. Rel. Spec., Human Resou.	2137	772-0640
Admn Serv. Ctr., Box 7210; 103 Mabry Pl., Garner 27529		
Sosower, Dr. Mark L., Asst. Prof., For. Lang.	2475	929-1207
130 1911 Bldg., Box 8106; Box 105, Rt. 3, Hillsborough 27278		
Southern, Dr. P. Sterling, (Linda), Assoc. Prof. & Spec. In Charge,		
Ent. Ext.	2697	467-6995
2309 Gardner, Box 7613; 1404 Rock Creek Ln., Cary 27511		
Sowell, Raymond U., Stu. Dev./Coop. Campus Min.	755-0928	876-6142
P.O. Box 588, 27602; 5905 Applewood Ln., 27609		
Sowell, Dr. Robert S., (Suester), Prof., Bio. & Agri'l. Engr.	3121	851-5999
184 Weaver, Box 7625; DeBoy St., 27606		
Sowinski, Dolores A., (George Allen), Res. Tech., Food Sci.	2974	782-7519
320 Schaub, Box 7624; 3020 Farrior Rd., 27607		
Sowter, Cheri R., (Bill), Vet. Tech., Vet. Teach. Hosp., SVM	829-4200	467-6518
4700 Hillsborough St., Box 8401; Rt. 1, Box 174, Morrisville 27560		
Sox, Harriet N., Res. Analyst, Hort. Sci.	3166	467-6388
273 Kilgore, Box 7609; 409 S. West St., Cary 27511		
Sox, Dr. Jason L., (Harriet), Asst. Prof. Emer., Math.	3258	467-6388
219 Harrelson, Box 8205; 409 S. West St., Cary 27511		
Spain, Edna G., (Drury), Food Serv. Asst., Univ. Dining	3963	266-3498
Dining Hall, Box 7307; 122 Kemp Dr., Knightdale 27545		
Spann, Miriam E., (Tom Bayley), Vet. Tech., Vet. Teach.		
Hosp., SVM	829-4200	828-5383
4700 Hillsborough St., Box 8401; 3102 Raymond St., 27607		
Spanton, Dr. Donald J., Adj. Prof., Text. Mgmt. & Tech.	829-8471	859-1688
Bus. & Econ., Meredith College; 108 Thornewood Dr., Cary 27511		
Sparks, Beverly P., (Merritt), Sec., Athl.	2102	772-0881
Case Athl. Ctr., Box 8501; 3915 Durham Dr., 27603		
Sparks, Marvin R., (Alma), Supv., Ind. Liaison,		
Sr. Engr. Ext. Spec., IES	2358	833-5382
215-Q Page, Box 7902; 3620 Cove Dr., 27604		
Sparrow, William H., Jr., Farm Supt., Univ. Res. Unit 10	471-6872	
Rt. 1, Box 198-B, Bahama, Box 7601; Rt. 5, Box 161-A, Durham 27704		

Name, Title, Department and Address	Office Phone	Resid. Phone
Spaulding, John A., (Juanita), Dist. Ext. Chm. Emer., Agri'l. Ext. Serv. 2110 McConnell Rd., Greensboro 27401		273-8767
Spaulding, Dr. Kathy A., Asst. Prof., Anat., Physiol. Sci. & Radiol., SVM .....829-4200	829-4200	829-9317
4700 Hillsborough St., Box 8401; 517 Cole St., 27605		
Spears, Dr. Jerry W., Assoc. Prof., Ani. Sci. ....2763	2763	851-6887
220E Polk, Box 7621; 4287 The Oaks Dr., 27606		
Speck, Janice L., (Bruce), Res. Tech., Plant Path. ....2735	2735	848-1502
2610 Gardner, Box 7616; 6424 Secret Dr., 27612		
Speck, Dr. Marvin L., (Jean), Prof. Emer., Food Sci.		787-6085
Box 7624; 3204 Churchill Rd., 27607		
Speece, Dr. Herbert E., (Ruth), Prof. Emer., Math. ....2381	2381	787-5971
205 Harrelson, Box 8205; 3408 Wade Ave., 27607		
Speight, Pamela J., (Ron), Sec., Ec. & Bus. ....3881	3881	779-0225
207 Hillsborough Bldg., Box 8110, Rt.1, Box 381; Apex 27502		
Speidel, George S., Jr., (Tommie), Asst. Prof. Emer., Math.		833-1282
1528 Carr St., 27608		
Spence, Jewell B., (Boyd), Acct., Admin. Serv., Engr. ....3329	3329	787-5703
101 Page, Box 7901; 427 Latimer Rd., 27609		
Spence, Lundie, Marine Educ. Spec., Sea Grant ....2454	2454	781-4498
UNC Sea Grant, Box 8605; 825 Runnymede Rd., 27607		
Spencer, Clarence W., Hskp. Asst., Phys. Plant ....3323	3323	
Park Shops, Box 7219; 2 Hyde Terr., 27601		
Spencer, Dr. Stephanie R., Asst. Prof., Hist. ....2483	2483	
109 Harrelson, Box 8108		
Spencer, Dr. Suzanne, (Ken Sexton), Adj. Asst. Prof., Plant Path. ....733-6930	733-6930	544-2068
NCDA, Plant Protection Section, P.O. Box 27647, 27611; Rt. 2, Box 75, Morrisville 27560		
Spicer, Lynel K., Hskp. Asst., Phys. Plant ....3323	3323	833-0993
Park Shops, Box 7219; 206 N. State St., 27601		
Spiekermann, Dr. Charles E., Asst. Prof., Mech. & Aero. Engr. ....2365	2365	
Box 7910		
Spiker, Dr. Steven L., (Jennifer), Assoc. Prof., Gen. ....2289	2289	787-4800
3530 Gardner, Box 7614; 1322 Canterbury Rd., 27608		
Spittler, Cynthia B., (Mike), Res. Tech., Hort. Sci. ....3132	3132	859-1083
1 Kilgore, Box 7609; 5301 Barclay Dr., 27606		
Spivey, Mildred L., Hskp. Supv., Phys. Plant ....3323	3323	821-3306
Park Shops, Box 7219; 105 Southwood Cir., Garner 27529		
Spooner, Jean, Ext. Spec., Bio. & Agri'l. Engr. ....3723	3723	829-9387
622 Downtown Blvd., Box 7625; 2404 Lawrence Dr., 27603		
Sprague, Jerry R., (Jenny), Liaison Geneticist, For. ....3168	3168	859-0581
1019-C Biltmore, Box 8002; 1806 Sara Ln., 27606		
Springs, Sharon A., Clk.-Typ., Food Sci. ....2968	2968	833-6592
218 Schaub, Box 7624; 1714 Oakwood Ave., 27610		
Sprinthall, Dr. Norman A., (Lois), Prof. & Head, Counselor Educ. ....2244	2244	781-7850
520 L Poe, Box 7801; 4800 Metcalf Dr., 27612		
Spruill, Susan E., Programmer Analyst, Stat. ....3311	3311	779-1654
1509 Varsity Dr., Box 8203; 6013 Oxford Green, 27502		
Spurlin, Pamela L., (Bill), Res. Tech., Food Sci. ....2969	2969	556-1960
214 Schaub, Box 7624; Rt. 4, Box 306-E4, Zebulon 27597		
Spurr, Dr. Harvey W., Jr., (Idamarie), Prof., Plant Path. ....693-5151	693-5151	693-3210
Oxford Tob. Res. Lab., USDA, Rt. 2, Box 16G, Oxford 27565, Box 1555; Rt. 3, Box 320, Oxford 27565		
Squirewell, David, Hskp. Asst., Phys. Plant ....3323	3323	365-3023
Park Shops, Box 7219; Box 449, Wendell 27591		
Sreedharan, Dr. Sunil P., Res. Assoc., Biochem. ....2581	2581	481-2417
339 Polk, Box 7622; 1201G Village Greenway, Cary 27511		
Srivastava, Dr. Ashok, (Shashi), Vis. Asst. Prof., Elec. & Comp. Engr. ....2336	2336	851-8750
437 Daniels, Box 7911; 2803-203 Avent Ferry Rd., 27606		
Stack, Dr. Edward M., Prof., For. Lang. ....2509	2509	787-2835
303 Harrelson, Box 8106; 3925 Arrow Dr., 27612		
Stadelmaier, Dr. Hans H., (Gerda), Res. Prof., Mat. Engr. ....2349	2349	
3143 Burlington, Box 7907; 906 Brooks Ave., 27607		

Name, Title, Department and Address	Office Phone	Resid. Phone
Stafford, Sinthea G., Libr. Clk., Circ.	3364	782-4305
1212 Library, Box 7111; 3915-C Tara Dr., 27609		
Stafford, Dr. Thomas H., Jr., (Judy A.), Vice Chan., Stu. Aff.	2446	851-1443
101 Holladay, Box 7301; 1317 Medfield Rd., 27607		
Stahel, Dr. Edward P., II, (Anne), Prof., Chem. Engr.	2327	787-8647
308 Riddick, Box 7905; 3900 Stratford Ct., 27609		
Stalker, Dr. H. Thomas, (Helene), Assoc. Prof., Crop. Sci.	3281	467-4808
840 Method Rd., Unit 3, Box 7629; 1206 Ivy Ln., Cary 27511		
Stallings, James W., (Delorese), Photo. Set., Univ. Graphics	2131	847-6184
Sullivan Dr., Box 7226; 1324 Norwood Rd., 27614		
Stallings, Judy D., Sec., For.	3168	467-1680
1019 Biltmore, Box 8002; 208 Clancy Circle, Cary 27511		
Stallings, Mardecia G., Analyst Programmer, Admn. Comp. Serv.	3110	469-4821
14 Peele, Box 7208; 101 B Butterwood Ct., Cary 27511		
Stallmann, Dr. Matthias F. M., (Martha), Asst. Prof., Comp. Sci.	7978	851-8536
122 Daniels, Box 8206; 3108-C Aileen Dr., 27606		
Stalnaker, Clayton L., Lect., Univ. Stud./Assoc. Phil. & Rel.	2479	833-8303
150 Harrelson, Box 7107; 806 Beaver Dam Rd., 27607		
Stam, Dr. Ephraim, Prof. Emer., Nuc. Engr.	3620	832-2589
3105 Burlington, Box 7909; 2845 O'Berry St., 27607		
Stam, Lynn F., (Billy), Res. Tech., Gen.	2294	
3616 Gardner, Box 7614		
Stamper, Frieda H., Libr. Technical Asst., Reserve Rm.	2597	787-2700
1320 Library, Box 7111		
Stancil, George R., (Sandra F.), Oper. Mgr., Comp. Ctr.	2517	469-1279
107 Hillsborough Bldg., Box 7109; 610 E. Maynard Rd., Cary 27511		
Stancil, Sandra F., (George R.), Purch. Asst., Purch. & Stores	2171	469-1279
218 Alumni, Box 7212; 610 E. Maynard Rd., Cary 27511		
Standaert, Dr. James E., (Mary Jane), Asst. Prof., Ext. Ec. & Bus.	2258	851-4725
18-E Patterson, Box 8109; 641 S. Lakeside Dr., 27606		
Stanfield, Marlyn W., Clk. Steno., Ent.	793-4118	793-9616
Rt. 2, Box 141, Plymouth; 1102 E. Main St., Plymouth 27962		
Stanislaw, Dr. Charles M., (Edythe), Prof., Ani. Sci.	2566	851-6222
204 Polk, Box 7621; 1445 Princess Ann Dr., 27607		
Stanley, Len (Ellen) C., Ext. Spec., Bio. & Agri'l. Engr.	3723	493-4770
622 Downtown Blvd., Box 7625; 2616 Chapel Hill Rd., Durham 27707		
Stanley, Myrtle J., Laun. Wkr., Laun.	2122	553-7517
Laundry, Box 7218; 711 Astor St., Clayton 27520		
Stanley, Nancy W., (Charles), Res. Tech., Food Sci.	2974	851-2186
313 Schaub, Box 7624; 5206 Asbury Cir., 27606		
Stannett, Dr. Vivian T., (Susanne), Prof., Chem. Engr.	2460	787-9568
116 Riddick, Box 7905; 1105 Bancroft St., 27612		
Stanosz, Dr. Glen R., (Jo Anne), Res. Assoc., Plant Path.	2751	859-1237
3415 Gardner, Box 7616; 542 Brent Rd., 27606		
Stanton, Catherine, Res. Tech. Gen.	2294	787-7766
3615 Gardner, Box 7614; 2421-K Wycliff Rd., 27607		
Stapleton, Dr. Marilyn J., (Ted), Res. Assoc., Microb.	3770	493-2022
4627 Gardner, Box 7615; 205 Winterberry Ridge, Durham 27713		
Stark, William B., Locksmith, Phys. Plant	3323	834-2694
8 Park shops, Box 7210; 1405-F Sawyer Lane, 27610		
Starke, Earl C., Hskp. Asst., Phys. Plant	3323	783-5661
Park Shops, Box 7219; 109 Ramblewood Dr., Apt. 24, 27609		
Starling, Linda S., Comp. Programmer, Admn. Comp. Serv.	3640	552-5754
1212 Blue Ridge Rd., Box 7227; 8645 Mt. Pleasant Rd., Willow Springs 27592		
Starr, Carol S., (Kevin)		851-6223
Admn. Serv. Ctr., 1037-A1 Avent Hill, 27606		
Starr, J. Stewart, (Julia), Farm Supt., Univ. Res. Unit 1	2713	772-2293
4616 Reedy Creek Rd., Box 7601; 605 Frances Dr., Garner 27529		
Starrett, James, Vis. Lect., Design	3260	832-7893
201C Leazar, Box 7701; 119 Ashe Ave., 27605		
Staten, Eyvonne M., Hskp. Asst., Phys. Plant	3323	266-2338
Park Shops, Box 7219; Rt. 2, Box 203, Knightdale 27545		
Steed, Constance W., (Lawrence), Admn. Asst., Prov. Off.	2931	787-0472
1 Holladay, Box 7101; 4413 Laurel Hills, 27612		

Name, Title, Department and Address	Office Phone	Resid. Phone
Steel, Dr. Robert G. D., (Jennie C.), Prof. Emer., Stat. 509 Cox, Box 8203; 2106 Coley Forest Pl., 27607	2584	787-4685
Steele, Bessie C., Box Off. Mgr., Athl. 101 Reynolds Coliseum, Box 8503; 3163 Morningside Dr., 27607	2106	787-1714
Steele, Mary M., (David A. Powell), Data Control Unit Supv., Dairy Rec. Proc. Ctr. Leazar, Box 7623; Rt. 4, Box 213, Wake Forest 27587	2074	556-2499
Steelman, Karen S., (Mark), Admn. Sec., Dir. Off. 1121 Library, Box 7111; 2229 Mariner Cir., 27603	2595, 2843	839-8675
Steelman, Linda C., Sec. Mdse./Mktg. Div., SSS SSS, Box 7224; Rt. 2, Box 68-H, Youngsville 27596	2161	556-1390
Steelman, Mark B., (Karen), Pers. Analyst, Human Resou. Admn. Serv. Ctr., Box 7210; 2229 Mariner Cir., 27603	2135	839-8675
Steen, Daniel R., Elec. Tech., Comp. Ctr. 128 Hillsborough Bldg., Box 7109; 711 W. Lane St., 27603	2517	839-1668
Steensen, Dr. Donald H. J., (Jean), Assoc. Prof., For. & Wood & Paper Sci. 2022-B Biltmore, Box 8002; 912 Merwin Rd., 27606	2891	851-1699
Steer, Dr. Michael B., (Mary Kelly), Asst. Prof., Elec. & Comp. Engr. 426 Daniels, Box 7911; 703 N. Kimbrough St., 27608	2336	839-0528
Stefanski, Dr. Leonard A., 612-A Cox; Lake Johnson Mews Apts., 4209-2 Avent Ferry Rd., 27606	2531	851-3145
Steffel, Thomas E., (Rina), Res. Tech., Ani. Sci. 4616 Reedy Creek Rd., Unit 1, 27607; Box 7621; 2008 Lormier Rd., 27606	859-0619	851-4263
Stein, Dr. Allen F., (Gale), Prof., Engl. 121 Tompkins, Box 8105; 1004 Washington St., Cary 27511	3854	467-9724
Stell, Macy M., (N.R., Jr. 'Sleepy'), Sec., Ext. 4-H & Youth Dev. 208 Ricks, Box 7606; R-5, Box 183-A, 27604	3242	266-1702
Stephan, David L., Spec., Ent. Ext. 1305 Gardner, Box 7613; 1611 Oberlin Rd., 27608	3619	833-9061
Stephens, Constance M., (Calvin), Clk.-Typ., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 708 E. Hargett St., 27601	829-4200	828-3415
Stephens, Jane F., Clk.-Typ., Ent. Ext. 2309 Gardner, Box 7613; P.O. Box 786, Wendell 27591	2703	365-7489
Stephens, Joyce B., Stores Off. Mgr., Central Stores Sullivan Dr., Box 7225	2197	
Stephens, Rose M., Commercial Cash., Laun. Laundry, Box 7218; 2205 Piney Plains Rd., Cary 27511	2122	851-0716
Stephens, Dr. Stanley G., (Dorothy), Prof. Emer., Gen. Gardner, Box 7614; 3219 Darien Dr.	2292	782-7099
Stephenson, Alan S., Agri'l. Res. Tech., Ent. Unit II, Method Rd., Box 7628; Rt. 1, Knightdale 27545	2765	266-2965
Stephenson, Becky A., Acct. Clk., Ani. Sci. 122 Polk, Box 7621; 869 Green Pine Dr., 27603	3532	779-3051
Stephenson, Becky S., (Jimmy), Acct. Tech., Fund Acct. 213 Admn. Serv. Ctr., Box 7203; Rt. 3, Box 348-A, 27603	2159	772-2473
Stephenson, Frankie S., (Jimmy), Clk.-Steno., Poul. Sci. 209 Scott, Box 7608; 3105 Banks Rd., 27603	2621	779-2665
Stephenson, Jimmy G., (Becky), Lab. Mgr., Chem. 418 Withers, Box 8204; Rt. 3, Box 348-A, 27603	2537	772-2473
Stephenson, Joye A., Admn. Sec., UNC Sea Grant 105 1911 Bldg., Box 8605, 702E Buckbranch Dr., Garner 27529	2454	772-6487
Stephenson, Ricky D., Painter, Phys. Plant Park Shops, Box 7219	3323	
Stephenson, Susan M., (Frank), Admn. Sec., Text. B3 Nelson, Box 8301; 3417 Horseshoe Bend, 27612	2438	848-4425
Stephenson, Thomas W., (Bette Anne), Dir., Ind. Ext. & Applied Res., IES 215-C Page, Box 7902; 613 Ashe Ave., Cary 27511	3262	467-7148
Sternloff, Dr. Robert E., (Kay), Prof., Rec. Resou. Admin. 4008-L Biltmore, Box 8004; 4106 Laurel Ridge Dr., 27612	3276	787-8202
Stevens, Dr. Charles E., (Barbara), Assoc. Dean & Dir., Res. & Grad. Studies, SVM 4700 Hillsborough St., Box 8401; 8844 Foggy Bottom Dr., 27612	829-4213	848-0569

Name, Title, Department and Address	Office Phone	Resid. Phone
Stevens, Janet B., (Donald), Sec., For. 2018 Biltmore, Box 8002; 3017-D Timberlake Rd., 27604	2891	872-3605
Stevens, Dr. Jerry B., (Maudine), Prof., Micro., Path. & Parasit., SVM 4700 Hillsborough St., Box 8401; 4752 Walden Pd. Dr.	829-4319	878-5418
Stevens, Ruth J., Clk.-Steno., Poul. Sci. Ext. 210 Scott, Box 7608; U-4 Country Club Homes, 27608	2621	781-4907
Stevenson, Mark A., (Barbara), Gymnastics Coach, Athl. Case Athl. Cntr., Box 8501; 200 Woodcroft Parkway, Durham 27713	2938	489-7342
Stevenson, William D., Jr., (Anne), Prof. Emer., Elec. & Comp. Engr. 405 Daniels, Box 7911; 2706 White Oak Rd., 27609	2336	782-0942
Stewart, Ann L., (Charles), Proj. Coord., Proj. APEX, Sch. of Educ. 602 Poe, Box 7801; Rt. 4-Jordan Woods, Pittsboro 27312	3223	542-2008
Stewart, Anthony E., Food Serv. Asst., Univ. Dining Dining Hall, Box 7307; 514½ Patterson Lane, 27601	3963	832-7981
Stewart, Carmen A., (James), Libr. Clk., Acqs. 3136 Library, Box 7111	3833	
Stewart, Dr. Debra W., (Edwin M. Speas, Jr.), Assoc. Grad Dean, Prof., Pol. Sci. & Pub. Admin. 203 Peele, 227 Link Bldg., Box 7102; 2001 Nancy Ann Dr., 27607	7052, 2481	782-8862
Stewart, Edna H., Clk.-Typ., Crop Sci. 4402 Williams, Box 7620; P.O. Box 75, Angier 27501	2511	639-2001
Stewart, Dr. James M., (Catherine), Assoc. Dir., Water Resou. Res. Inst. 225 Page, Box 7912; 3421 Doyle Dr., 27607	2815	782-2403
Stewart, Dr. Joan H., (Philip), Prof. & Head, For. Lang. 118 1911 Bldg., Box 8106; 6 Logging Trail, Durham 27707	3343	493-1895
Stewart, John G., Asst. Prof., Phys. Educ. 2016D Carmichael, Box 8111; 156 Jones-Franklin Rd., 27606	2487	851-1381
Stewart, Rose W., (John), Food Serv. Mgr., Univ. Dining Shuttle Inn Snackbar; 401 Grovemont Rd., 27603	2128	772-0838
Stewart, Dr. Tony K., (Julie), Asst. Prof. of Rel., Phil. & Rel. Winston G-104A, Box 8103; 3301 Walnut Creek Parkway, Apt. G, 27606	3214	859-3754
Stewart, Dr. William J., (Kathleen), Prof., Comp. Sci. 131-G Daniels, Box 8206; 107 Duryer Ct., Cary 27511	7824	467-6237
Stiff, Dr. Lee V., (Renee), Asst. Prof., Math. & Sci. Educ. 326D Poe, Box 7801; 8704 Hidden View Ct., 27612-1101	2238	848-6672
Stikeleather, Dr. Larry, (Ruth Ann), Prof., Bio. & Agri'l. Engr. 178 Weaver, Box 7625; 5713 Baird Dr., 27606	3121	832-8001
Stillman, Mavis S., Prog. Asst., Con. Educ. & Professional Dev. 147 McKimmon; Box 7401; 86 Liles-Dean Rd., Wendell 27591	2261	365-9693
Stimson, Ronald W., Jr., Lab. Ani. Tech., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 4001 Ebenezer Rd., 27612	829-4200	787-4375
Stines, Bill J., (Sue), Asst. Prof., Stat. 612D Cox, Box 8203; 2905 Piney Plains Rd., Cary 27511	2531	851-0549
Stinner, Dr. Ronald E., (Karen Asbury), Prof., Ent. Unit I, 840 Method Rd., Box 7628; Rt. 2, Box 65, Morrisville 27560	2638	544-6246
Stipe, Dr. Robert E., (Josie), Prof., Design Brooks 310C, Box 7701; 100 Pine Ln., Chapel Hill 27514	2203, 2205	967-2448
Stitzinger, Dr. Ernest L., (Carol), Prof., Math. 220 Harrelson, Box 8205; 1005 Brooks Ave., 27607	3258	834-7474
Stock, Mary A., Vet. Tech., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 313 Waldo St., 27511	829-4200	469-0578
Stocks, Bobby G., (Carroll), Athl. 106 Reynolds Coliseum, Box 8501; 6503 King Lawrence Rd., 27650	2108	851-2662
Stoddard, Carla E., Asst. Athl. Trainer, Athl. Chester Grant Training Rm., Reynolds Coliseum, Box 8501; 5708 Timber Lane, 27606	2111	
Stoddard, Dr. Edward F., (Nancy), Assoc. Prof., Mar., Earth & Atmos. Sci. 110-B Withers, Box 8208; 301 Morrison Ave., 27608	7939	833-8773
Stoker, Glenn E., Vet. Tech., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401	829-4200	
Stokes, Barrie B., (Eric), Spec., Fam. Resou. Mgmt., Agri'l. Ext. F-2 Ricks, Box 7605; 136 Amhurst Dr., Durham 27713	2770	544-3559

Name, Title, Department and Address	Office Phone	Resid. Phone
Stokes, Deborah R., (Douglas), Sec., Ctr. For Comm. & Signal Proc.	3015	481-1067
320 Daniels, Box 7914; 101 Inverness Court, Cary 27511		
Stomp, Dr. Anne-Marie, (Cornelis), Asst. Prof., For.	2891	365-9890
Biltmore, Box 8002; 241 S. Main St., Wendell 27591-1279		
Stone, Dr. Elizabeth A., (Gary), Assoc. Prof., Comp. Ani. & Sp. Species Med., SVM	829-4346	782-3082
4700 Hillsborough St., Box 8401; 3609 Pewter Pl., 27612		
Stone, Dr. John R., (Susan), Assoc. Prof., Civil Engr.	2331	781-1908
411 Mann, Box 7908; 1108 Gunnison Pl., 27609		
Stone, Olive A., Off. Mgr., Telecomm.	2141	467-6378
Admn. Serv. Ctr. 2nd Floor, Box 7217; 222 Hillsboro Rd., Cary 27511		
Stone, Dr. Paul S., (Eupearl), Ext. Assoc. Prof., Ec. & Bus.	3041	851-4881
318 Hillsborough Bldg., Box 8110; 7033 Robbie Dr., 27607		
Stoops, Dr. Robert F., (Martha), Prof. Emer., Mat. Engr.	2377	787-3315
229 Riddick, Box 7907, 3705 Corbin St., 27612		
Storm, Elizabeth L., Clk.-Typ., Trans.	3424	
Admn. Serv. Ctr., Box 7221		
Stott, Charles C., (Alice), Assoc. Prof. Emer., Rec. Resou. Admin.		
5714 Landing Ct., Rt. 1, Emerald Isle, Morehead City 28557		
Strang, Edith A., Libr. Asst., Gov. Docu.	3280	833-0941
2110 Library, Box 7111; 6008 Neuse St., 27610		
Straughn, Edward H., (Kay), Agri'l. Res. Tech., Crop Sci. Ext.	3633	542-4293
1215 Williams, Box 7620; Rt. 2, Pittsboro 27312		
Straus, Dr. Stephen K., Vis. Lect., Pol. Sci. & Pub. Admin.	2481	782-9382
228 Link Bldg., Box 8102; 5456 Pine Top Cir., 27612		
Strenkowski, Dr. John S., (Deborah), Assoc. Prof., Mech. & Aero. Engr.	3024	467-0642
2403 Broughton, Box 7910; 205 Crimmons Cir., Cary 27511		
Strickland, Alan B., Res. Tech., Anat., Physiol. Sci. & Radiol., SVM	829-4356	478-4373
4700 Hillsborough St., Box 8401; Rt. 1, Box 710, Spring Hope 27882		
Strickland, Betty M., (Willard), Admn. Asst., Comp. Ctr.	2517	269-9545
M-2 Hillsborough Bldg., Box 7109; Rt. 5, Box 659, Zebulon 27597		
Strickland, Corbet, (Jo), Res. Tech., Poul. Sci.	2623	755-0425
212 Scott, Box 7608; 3112 Burntwood Cir., 27610		
Strickland, David D., (Dot), Instru. Mkr., Nuc. Engr.	2322	269-8529
1214 Burlington, Box 7909; Rt. 2, Middlesex 27557		
Strickland, Dorothy C., Instr., Comp. Sci.	2858	967-6599
122 Daniels, Box 8206; 111 Cameron Ct., Chapel Hill 27514		
Strickland, Dr. Gay G., Physician, Health Serv.	2564	846-7446
Clark Inf., Box 7304; 6304 Lewisand Circle, 27609		
Strickland, Herbert N., Maint. Supv., Univ. Stu. Ctr.	3340	269-7518
B102 Univ. Stu. Ctr., Box 7306; Rt. 5, Box 538, Zebulon 27597		
Strickland, Howard N., (Ann), Maint. Mech., Phys. Plant	3080	829-9666
Armory Shop, Box 7219; 1506 State Rd., 27606		
Strickland, Martha M., (Gary H.), Acct. Supv., Phys. Plant	2180	
209-A Morris, Box 7219; 1336 Bloomingdale Dr., Cary 27511		
Strickland, Marvin, (Tootie), Instru. Mkr., Engr. Res. Serv. Div.	2834	269-8526
1136 Burlington, Box 7903; 509 Wedgewood Ave., Zebulon 27597		
Strickland, Mary M., Admn. Off., Prov. Off.	2193, 3919	
201 Holladay, Box 7101		
Strickland, Sam R., Stock Clk., Central Stores	2230	963-2825
Sullivan Dr., Box 7225; Rt. 4, Box 286, Four Oaks 27524		
Strider, Dr. David L., (Theresa), Prof., Plant Path.	2751	467-8771
3411 Gardner, Box 7616; 1001 Wilshire Dr., Cary 27511		
Strong, Lewis M., Mech. Sys. Engr., Phys. Plant	2184	
17 Morris, Box 7219; 5329 Barclay Dr., 27606		
Strong, Samuel W., (Leigh Ann), Area Dir., Housing & Resid. Life	2406	6404
Harris, Box 7315; Tucker, 27695		
Strosio, Dr. Michael A., (Lucy), Adj. Assoc. Prof., Elec. & Comp. Engr.	2336	489-7581
224-B Daniels, Box 7911; 103 Monticello Ave., Durham 27707		
Struble, Dr. Raimond A., (Marilyn) Prof., Math.	2370	834-3329
324 Harrelson, Box 8205; 119 Hawthorne Rd. 27605		
Stuart, Archie D., (Katherine), Prof. Emer., Crop Sci.		787-2866
1435 Duplin Rd., 27607		

Name, Title, Department and Address	Office Phone	Resid. Phone
Stuart, Carolyn P., (Jimmy), Sec., Athl.	2114	894-3790
Weisiger-Brown Athl. Fac., Box 8502; Rt. 1, Angier 27501		
Stubbs, Samuel, Food Serv. Asst., Univ. Dining	3963	833-3953
Dining Hall, Box 7307; 918 Blount St., 27604		
Stuber, Dr. Charles W., (Marilyn), Prof., Gen.	2289	787-0313
3627 Gardner, Box 7614; 1800 Manuel St., 27612		
Stuckey, Perri G., DHI Rec. Spec., Ani. Sci.	2771	782-9229
111 Polk, Box 7621; 3608 Horton St., Apt. 102, 27607		
Stuckey, William C., (Celeste), Prof., Text. Mgmt. & Tech.	3890	787-4381
B52 Nelson, Box 8301; 1537 Dellwood Dr., 27607		
Stucky, Dr. Jon M., Assoc. Prof., Bot.	2227	832-7331
3203 Gardner, Box 7612; 2503 Mayview Rd., 27607		
Styons, William R., (Jenny), Univ. Cash. & Stu. Accts., Fin. & Bus.	2986	782-7471
2 Peele, Box 7213; 2607 Wells Ave., 27608		
Such, Joyce M., Vet. Tech., Vet. Teach. Hosp., SVM	829-4200	872-6097
4700 Hillsborough St., Box 8401; 3008 Glenridge Dr., 27604		
Suddarth, Minnette S., (Pete), Agri'l. Res. Tech., Ent.	3391	772-8824
3709 Hillsborough St., 115 Oak Ridge Dr., Willow Springs 27592		
Suddith, Jane I., (Larry), Res. Tech., Gen.	2288	772-6220
2540 Gardner, Box 7614; 1207 Buckingham Rd., Garner 27529		
Sugg, Margaret A., Libr. Tech. Asst., Interlibr. Loan	2116	
1133 Library, Box 7111		
Suggs, Dr. Charles W., (Jane), Prof., Bio. & Agri'l. Engr.	3101	851-0836
186 Weaver, Box 7625; 1507 Trailwood Dr., 27606		
Suggs, Faye D., (Gladwin), Res. Tech., Poul. Sci.	2729	467-1702
Mycotoxin Lab., Box 7608; 1504 Walnut St., Cary 27511		
Suggs, Kathryn N., (John G.), Admn. Asst., Purch. & Stores	2171	467-3168
216 Alumni, Box 7212; 1321 Bloomingdale Dr., Cary 27511		
Suh, Dr. Moon W., (Chisook), Adj. Prof., Text. Engr. & Sci.		379-2505
Burlington Industries, Inc., Box 21207, Greensboro 27420		288-7962
1907 Forest Valley Rd., Greensboro 27410		851-3427
Sullivan, Dr. Arthur L., (Sharon), Prof. & Head, Land. Arch.	2204	
223 Brooks, Box 7701; 1217 Chaney Rd., 27606		
Sullivan, Donald B., (Linda), Sys. Analyst, Admn. Comp. Serv.	2794	965-5666
B-21 Hillsborough Bldg., Box 7209; Rt. 2, Box 298, Selma 27576		
Sullivan, Dr. Gene A., (Iris), Prof., Crop Sci. Ext.	3331	965-5525
4207 Williams, Box 7620; Rt. 2, Box 330, Princeton 27569		
Sullivan, Millie A., (William), Admn. Sec., Wood & Paper Sci.	3181	781-4046
1022-A Biltmore, Box 8005; 408 Cedarview Ct., 27609		
Sullivan, Sharon L., Sec., Design	3785	965-6367
200 Brooks, Box 7701; Rt. 1, Box 316, Princeton 27569		
Sullivan, William T., Jr., Res. Asst., Zool.		704-684-5757
Box 7617; P.O. Box 537, Fletcher 28732		704-685-9737
P.O. Box 5213, Hendersonville 28793		
Sumner, Dr. Daniel A., (Susan), Asst. Prof., Ec. & Bus.	3884	833-3907
211-C Hillsborough Bldg., Box 8110; 327 E. Jones St., 27601		
Sung, Wayne, Datacomm. Analyst, Computing Ctr.	2517	
Hillsborough Bldg., Box 7109		
Sura, Hansa C., (Chandrakant), Data Entry Oper., Dairy Rec. Proc. Ctr.	2075	847-6305
Leazar, Box 7623; 6120 Bellow St., 27609		
Surh, Dr. Gerald, (Nelia Berko), Asst. Prof., Hist.	2484	783-5398
109 Harrelson, Box 8108; 4923 Grinnell Dr., 27612		
Sutherland, Dr. Joseph G., (Myrtle), Prof. Emer., Ec. & Bus.		787-9814
5405 Thayer Dr., 27612		
Sutter, Stephen R., Spec. Ext. Farm Bus. Rec., Ec. & Bus.	2885	851-7705
314B Hillsborough Bldg., Box 8110; 1004H Sandlin Pl., 27606		
Suttie, Janet L., Res. Tech., Bot.	2225	829-1213
1226 Gardner, Box 7612; 601 Rosemont Ave., 27607		
Sutton, Dr. Turner B., Assoc. Prof., Plant Path.	2751	832-4733
3407 Gardner, Box 7616; 1303 Dylan-Heath Ct., 27608		
Suval, Dr. Elizabeth M., Prof., Soc. & Anth.	3114	787-4206
318 1911 Bldg., Box 8107; 4812 Latimer Rd., 27609		

Name, Title, Department and Address	Office Phone	Resid. Phone
Swain, Len R., (Susan), Agri'l. Res. Tech., Crop Sci.	2867	851-7477
203 Weed Sci. Ctr./3123 Ligon St., Box 7627; 1301 Trinity Cir., 27607		
Swain, Robert W., (Rose), Ext. Area Swine Spec., Ani. Sci.	592-7161	293-7777
Box 303-C, E. Rowan Rd., Clinton 28328; Rt. 2, Box 117Q, Warsaw 28398		
Swaigood, Dr. Harold E., (Janet), WNR Prof., Food Sci.	2968	787-8236
218A Schaub, Box 7624; 3711 Corbin St., 27612		
Swallow, Dr. William H., (Louise Romanow), Assoc. Prof., Stat.	2541	781-0955
518-E Cox, Box 8203; 3131 Morningside Dr., 27607		
Swaney, Philip A., (Nancy), Const. Est., Phys. Plant	2184	779-1416
6-A Morris, Box 7219; 2019 Englewood Dr., Apex 27502		
Swann, Winifred M., Craft Spec., Univ. Stu. Ctr.	2457	851-6951
Lower Level, Thompson Bldg., Box 7305; 407 Buck Jones Rd., 27606		
Swanson, Dr. Clifford R., (Terry), Asst. Prof., Anat., Physiol.		
Sci. & Radiol., SVM	829-4298	872-0403
4700 Hillsborough St., Box 8401; 1905 Quail Ridge Rd., 27609		
Swart, Charlotte H., (Cornelius), Stu. Serv. Mgr., For. Resou.	2883	787-4270
2028-D Biltmore, Box 8001; 2909 Old Orchard Rd., 27607		
Swartzel, Dr. Kenneth R., (Peggy), Assoc. Prof., Food Sci.	2959	851-2495
116-C Schaub, Box 7624; 3504 S. Timberwood Ct., 27606		
Swayne, Betty J., (David), Acct. Clk., Elec. & Comp. Engr.	2336	772-7614
232 Daniels, Box 7911; 905 Park Ave., Garner 27529		
Sweeney, Dr. Craig, Resid. Lg. Ani. Surgery, SVM	829-4200	
4700 Hillsborough St., Box 8401		
Sweet, James H., Jr., Dir., Stu. Loans, Fin. & Bus.	2985	544-3270
2 Peele, Box 7213; 113 Oakmont Cir., Durham 27713		
Sweigard, Linda M., (Doug), Sec., Study Abroad Off., Stu. Aff.	2087	782-4583
105 Alexander, Box 7315; 804 Silver Leaf Pl., 27609		
Swicegood, Arthur H., (Marie), Agri'l. Res. Tech., Ani. Sci.	2637	362-8511
3720 Lake Wheeler Rd., Unit 2, 27603, Box 7621; Rt. 6, Box 245, Apex 27502		
Swint, William H., (Susan), Res. Tech., Ext. For. Resou.	3066	846-7614
Hodges Lab, Box 8003; Rt. 15, Box 234-B, 27612		
Swiss, Dr. James E., Assoc. Prof., Pol. Sci. & Pub. Admin.	2481	851-8053
206 Link Bldg., Box 8102; 1113 Craborchard, 1-E, 27606		
Switzer, Dr. William L., (Mary Ellen), Assoc. Prof., Chem.	2945	847-7471
635-A Dabney, Box 8204; 8816 Trailing Cedar Dr., 27612		
Sword, Diane E., Vet. Tech., Vet. Teach. Hosp., SVM	829-4200	469-5349
4700 Hillsborough St., Box 8401; 104-F Terrace Dr., Cary 27511		
Sykes, Donna, Agri'l. Res. Asst., Univ. Res. Unit 2	2759	
3720 Lake Wheeler Rd., Box 7601; 5500 Donnybrook Rd., 27607		
Sykes, E. Richard, (Pam), Men's Golf Coach, Athl.	3317	365-7512
Case Athl. Ctr., Box 8501; 201 Griffin St., Wendell 27591		
Sylla, Dr. Edith D., (Richard), Asst. Dean, Res. & Grad. Prog.; Prof., Hist.,		
Dean's Off., Hum. & Soc. Sci.	2467, 2485	782-1641
106 Link Bldg., 110 Harrelson, Box 8101, 8108; 3113 Birnamwood Rd., 27607		
Sylla, Dr. Richard E., (Edith), Prof., Ec. & Bus.	3881	782-1641
209-C Hillsborough Bldg., Box 8110; 3113 Birnamwood Rd., 27607		
Sylvester, John, Jr., (Mayumi), Dir., N.C. Japan Ctr.	3450	848-1286
5 Rosemary St., Box 8112; 10109 Earthstone Ct., 27609		

T

Tachida, Dr. Hidenori, (Miyako), Vis. Asst. Prof., Stat.	2585	783-5287
509-D Cox, Box 8203; 2409-C Landmark Dr., 27607		
Tai, Dr. Kuo-Chung, (Ling-Ching), Prof., Comp. Sci.	7862	467-9499
131C Daniels, Box 8206; 1403 Brunson Ct., Cary 27511		
Tallant, Dawn M., Sec., Development	2846	781-0112
11 Holladay, Box 7501; 6135 Loch Laurel Lane, 27612		
Talley, Dennis G., Hskp. Asst., Phys. Plant	3323	834-3260
Park Shops, Box 7219; 2201 Dandridge Dr., 27610		

Name, Title, Department and Address	Office Phone	Resid. Phone
Talley, Edna, (Roy), Sched. Off., Ec. & Bus. 206 Patterson, Box 8109; Rt. 3, Box 409-K, Fuquay-Varina 27526	3273	552-6137
Tally, Denise D., (Michael H.), Res. Tech., SVM 4700 Hillsborough St., Box 8401; 310 Dry Ave., Cary 27511	829-4200	467-5253
Tanner, James T., Jr., (Betty), Sr. Min. Engr., Min. Res. Lab. 180 Coxe Ave., Asheville 28801		704-251-6155
5 Auburndale Dr., Asheville 28806		704-667-0032
Tanner, Ray, Asst. to the Ath. Dir., Asst. Baseball Coach, Athl. 101 Reynolds Coliseum, Box 8503; 1921 Gorman St., 27606	2169	851-9757
Tant, Joe D., Paint., Phvs. Plant Park Shops, Box 7219; Rt. 1, Box 311-C, Fuquay-Varina 27526	3323	
Tapscott, Nancy B., Prog. Asst., Con. Educ. 147 McKimmon, Box 7401; 367 Wilmot Dr., 27606	2261	851-3666
Tarantini, George L., Men's Soccer Coach, Athl. Case Athl. Ctr., Box 8501; 5316 Wayne St., 27606	3476	851-3702
Tarleton, Barry S., Agri'l. Res. Tech., Crop Sci. Reedy Creek, 7620; 1220-C Carlton Ave., 27606	3633	821-4253
Tarlton, Nell S., Sec., Soil Sci. 3403 Williams, Box 7619; 5708 Pool Side Dr., 27612	3285	781-8345
Tart, Glenn, (Rochelle), Tob. Insp., Crop Sci. 3709 Hillsborough St., Box 8604; Rt. 2, Box 289A, Dunn 28334	2827	894-2398
Tart, Jenny W., (Larry), Data Proc. Asst., Admn. Comp. Serv. Data Proc. ... 12 Peele, Box 7208; Rt. 3, Box 108, Benson 27504	2459	894-2441
Tart, Jimmy C., (Betty), Sr. Publ. Ed., Agri'l. Comm. 318 Ricks, Box 7603; 1202 Imperial Rd., Cary 27511	3173	467-8179
Tart, Mary S., Lab. Ani. Tech., Lab. Ani. Resou., SVM 4700 Hillsborough St., Box 8401; 525 Brent Rd., 27607	829-4201	851-8245
Tarver, Dr. Fred R., Jr., (Aileen), Ext. Prof., Food Sci. 129-D Schaub, Box 7624; 5501 Parkwood Dr., 27612	2956	787-5469
Tate, Brita M., (John), Asst. Prog. Dir., Univ. Stu. Ctr. 3114 Univ. Stu. Ctr., Box 7306; 800 Lake Raleigh Rd., 27606	2451	834-0919
Tate, Emily D., (Bobby), Sec., Nuc. React. Prog. 2116 Burlington, Box 7909; 1113 Park Ave., Garner 27529	2321	772-6474
Tate, Leisa, Hskp. Asst., Phys. Plant Park Shops, Box 7219; 2114 Tudor Pl., 27610	3323	839-1059
Tate, Dr. Lloyd P. Jr., (Lynn), Asst. Prof., Food Ani. & Equ. Med., SVM 4700 Hillsborough St., Box 8401; Rt. 3, Box 318, Apex 27502	829-4297	362-4776
Tate, Paul D., Agri'l. Res. Tech., Soil Sci., 2016 Fanning Bridge Rd., Fletcher 28732-9628		704-684-3562
1017 Sylvan Blvd., Hendersonville, 28739		704-692-7489
Taylor, A. Dean, Clk., Ani. Sci. 122 Polk, Box 7621; 1131 Carlton Ave., Apt. B, 27606	3532	755-1636
Taylor, Bessie H., Pers. Analyst, Human Resou. Admn. Serv. Ctr., Box 7210; 901 E. Lenoir St., 27610	7175	834-7492
Taylor, Denise S., Health & Safety Off., Public Safety Field House, Box 7220	2568	
Taylor, Dennis A., Univ. Dev. Off., Development 11 Holladay, Box 7501; 550 Brent Rd., 27606	2846	851-4981
Taylor, Edward H., (Gladys), Agri'l. Res. Tech., Ani. Sci. 4616 Reedy Creek Rd., Univ. I., 27607, Box 7621; 2200 Trenton Rd., 27607	851-4868	851-1522
Taylor, Ellen C., (Robert), Sec., Home Ec., Agri'l. Ext. F-3 Ricks, Box 7605; 4332 Woodlawn Dr., 27604	2770	876-6871
Taylor, Dr. Glenn R., (Alice), Prof. Emer., Civil Engr. 208 Mann, Box 7908; 2805 Glen Burnie, 27607	2331	782-6648
Taylor, Harriett M., Nursing Asst., Clark Inf. Clark, Box 7304; 1210 E. Hargett St., 27610	2562	832-1570
Taylor, Henry F., Elec. Tech., ECE 112 Daniels, Box 7911; 7604 Trudy Ln., Garner 27529	2336	772-6409
Taylor, Joseph C., Ship. & Rec. Supv. SSS, Box 7224; 914 Lake Boone Tr., 27607	2164	782-0175
Taylor, Joyce A., Ext. Educ. & Trng. Spec., Seafood Lab P.O. 1137 Drawer, Morehead City 28557; P.O. Box 362-13, Glenn Cove, Morehead City 28557	726-7341	726-6784

Name, Title, Department and Address	Office Phone	Resid. Phone
Taylor, Kimberly E., (Ronnie), Sec., Athl.	2114	467-7118
Weisiger-Brown Athl. Fac., Box 8502; 105 Taylor's Pond Dr., Cary 27511		
Taylor, Lauren W., (Mary Ann), Res. Asst., Comp. Sci.	3271	467-4604
106 Daniels, Box 8206; 1015 Surry Ct., Cary 27511		
Taylor, Marian E., (Richard),	2234	
602 Poe, Box 7801; 1900 Trawick Rd., 27604		
Taylor, Paula F., (Douglas), Pers. Off., Univ. Dining	3090	772-7235
217 Harris, Box 7307; 403 Tiffany Circle, Garner 27529		
Taylor, Dr. Raymond G., Jr., Prof. & Head, Educ. Ldrship. & Prog. Eval.	3127	553-2232
608P Poe, Box 7801; 324 Fox Hollow Dr., Clayton 27520		
Taylor, Stuart V., (Myrtle), Agri'l. Res. Tech., Ani. Sci.	2713	834-3255
4616 Reedy Creek Rd., Unit 1, 27607, Box 7621; 4901 Reedy Cr. Rd., 27607		
Taylor, Suzanne B., Sys. Analyst, Comp. Serv., Urb. Aff.	2578	846-7772
265 McKimmon, Box 7401; 9601 Post Mill Pl., 27614		
Taylor, Wayne, (Mary Hawkins), Prof., Design	2203	828-8792
213 Brooks, Box 7701; 215 Hillcrest Rd., 27605		
Taylor, William E., (Vicky), Clk., Agri'l. Comm.	2791	
2 Ricks, Box 7603; 3820 Kelford St., 27606		
Taylor, Willie E., (Linda), Maint. Mech., Phys. Plant	2184	839-0505
Heating Plant, Box 7219; 1303 Baez St., 27608		
Teague, Ellen L., Asst. Registrar, Reg. & Rec.	3084, 2572	859-1275
100 Harris, Box 7313; 4101 Kaplan Dr., 27606		
Teander, Judy G., (Jeneal), Sec., Soc. & Anth.	2702	467-0765
340 1911 Bldg., Box 8107; 123 Queensferry Rd., Cary 27511		
Tebo, Robert J., (Grace), HVAC Mech., Phys. Plant	3080	772-0679
Armory, Box 7219; 1404 Kelly Rd., Garner 27529		
Tector, John O., (Patricia), Asst. Prof., Arch.	3051	467-8688
305 Brooks Add., Box 7701; 907 Winslow Ct., Cary 27511		
Teng, Dr. Ching-Sung, (Christina), Prof., Anat., Physiol. Sci. & Radiol., SVM	829-4237	848-6655
4700 Hillsborough St., Box 8401; 8709 Lakewood Dr., 27612		
Teng, Dr. Christina T., Adj. Asst. Prof., Anat., Physiol. Sci. & Radiol., SVM		
Box 8401; NIEHS, Res. Tri. Pk.		
Tenorio, Carol, Reg. Clk., Reg. & Rec.	2572	787-2039
100 Harris, Box 7313; 3600 Laurel Cir., 27612		
Terrell, Clyde, Stock Clk., Phys. Educ.	3508	
1217E Carmichael, Box 8111; 820 Campanella Dr., 27610		
Terrell, Elizabeth F., (Lawyer), Res. Tech., Gen.	2289	829-9438
3621 Gardner, Box 7614; 2112 Gilliam Ln., 27610		
Terry, Anna M., (Jerry), Sec., Development	7458, 7237	
101 Page, Box 7901		
Terry, Barbara A., Vis. Lect., Zool.	3341	
2712 Bostian, Box 7617		
Terry, Laura R., (Charles), Sec., Ext. For. Resou.	3386	266-3773
3036 Biltmore, Box 8003; Rt. 2, Box 46, Knightdale 27545		
Tesar, Paul, (Holly), Assoc. Prof., Design	2204	821-2208
310D Brooks, Box 7701; 804 Rosemont Ave., 27607		
Tess, Dr. Michael W., (Kathy), Asst. Prof., Ani. Sci.	2769	847-4429
226 Polk, Box 7621; 7504 Ray Rd., 27612		
Tetro, Mary A., (Jack C. Padgett), Asst. Coord. for Advising, Prog. of Acad. Advance. for Stu. Athl.	2464, 3680	833-8841
124 Reynolds Coliseum, Box 7104; 314 Pogue St., 27607		
Tew, Eva W., (Worth), Sec., Water Resou. Res. Inst.	2815	772-9296
225 Page, Box 7912; 1203 Wade Ave., Garner 27529		
Tew, Raymond E., Advisor, Engr. & Comp. Sci., Career Plan. & Place.	2396	
28 Dabney, Box 7303; 2848 Rue Sans Famille, 27607		
Thach, Sandra G., (Jerry), Sec., Stu. Aff.	3151	782-9619
210 Harris, Box 7316; 5221 Country Tr., 27612		
Thal, Dr. Wayne M., Res. Assoc., Plant Path.	693-5151	829-1695
Box 7616; Tob. Res. Lab., Rt. 2, Box 1555, Oxford 27565; 2601 Clark Ave., 27607		
Tharp, Dr. Alan L., (Kay), Prof., Comp. Sci.	7435	851-2673
123-D Daniels, Box 8206; 800 Merwin Rd., 27606		

Name, Title, Department and Address	Office Phone	Resid. Phone
Tharpe, Willis T., Laun. Oper., Laun.	2122	834-9219
Laundry, Box 7218; A 21 Washington Terr., 27607		
Tharrington, Carol H., (Edward), Sec., N.C. Japan Ctr.	3450	772-0339
5 Rosemary St., Box 8112; 2006 Ryerson Dr., Garner 27529		
Tharrington, JoAnna B., (Tony), Res. Tech., Food Sci.	2950	469-1317
28 Schaub, Box 7624; 105 Huntington Cir., Cary 27511		
Thaxton, James M., Farm Supv., Univ. Res. Unit 1	2713	552-5173
4616 Reedy Creek Rd., Box 7601; Rt. 1, Box 257, Holly Springs		
Thayer, Dr. Paul W., (Bjorg), Prof. & Head, Psy.	2251	467-2880
640-D Poe, Box 7801; 117 Duncansby Ct., Cary 27511		
Theil, Dr. Elizabeth C., (Michael), Prof., Biochem.	2581	782-0853
339A Polk, Box 7622; 3316 Mesa Ct., 27607		
Theil, Dr. Michael H., (Elizabeth), Prof., Text. Chem.	2551	782-0853
218J Clark, Box 8302; 3316 Mesa Ct., 27607		
Thies-Sprinthall, Dr. Lois, (Norman), Vis. Assoc. Prof., Curr. & Inst.	3221	781-7850
300G Poe, Box 7801; 4800 Metcalf Dr., 27612		
Thomas, Carmen W., Sec., Univ. Res. Unit	2823	
3 Patterson, Box 7601		
Thomas, Delcenia L., Libr. Clk., Docu.	3370	
2109 Library, Box 7111		
Thomas, Dr. Frank B., (Connie), Ext. Prof., Food Sci.	2956	787-2855
129-F Schaub, Box 7624; 2704 Lakeview Dr., 27609		
Thomas, Herbert L., Hskp. Asst., Phys. Plant	3323	235-4883
Park Shops, Box 7219; P.O. Box 356, Middlesex 27557		
Thomas, Dr. Judith F., (George), Assoc. Prof., Phyt., & Asst. Prof., Bot.	2778	782-9558
2004 Gardner, Box 7618; 3061 Wycliff Rd., 27607		
Thomas, Patricia A., Clk.-Typ., Ext. Pers.	2814	
112 Ricks, Box 7602; 233 Colleton Rd., 27610		
Thomas, Dr. Richard J., (Margaret), Prof. & Head, Wood & Paper Sci.	3181	467-6693
1022-N Biltmore, Box 8005; 913 Warren St., Cary 27511		
Thomas, Rosalee S., Sec., Plac. Off., Agri. & Life Sci.	3249	847-5599
111 Patterson, Box 7601; 7818 Coach House Ln., 27609		
Thomas, Samuel C., Mail Clk., Phys. Plant	3974	552-2342
Leazar, Box 7219; Rt. 3, Box 158, Fuquay-Varina 27526		
Thomas, Sharon C., (Stephen), Sec., Text. Chem.	2551	779-3080
115 Clark Lab., Box 8302; 801 Colonial Dr., 27603		
Thomas, Wendy, (Terry), Food Serv. Asst., Univ. Dining	3963	
Dining Hall, Box 7307; 320 S. Walker St. 6, Cary 27511		
Thomlinson, Annette, Clk.-Typ., Microb.	2391	
4515 Gardner, Box 7615		
Thompson, Debbie S., (Charlie), Sec., Oper. Res. Prog.	2350	779-2747
322-A Riddick, Box 7913; 1406 Kenbrook Dr., Garner 27529		
Thompson, Earl C., Food Serv. Asst., Univ. Dining	2021	897-6624
Univ. Stu. Ctr., Box 7307; P.O. Box 433, Erwin 28339		
Thompson, Eric, Agri'l. Res. Tech., Hort. Sci.	2685	469-4998
Hort. Sci. Grnhse., Box 7609; 106-2C Collier Place, Cary 27511		
Thompson, Dorothy J., Clk., Grad. Sch.	2872	834-9172
103 Peele, Box 7102; 1900 Charles St., 27611		
Thompson, Helen J., (Russell), Sec., Ext. 4-H & Youth Dev.	2801	
201 Ricks, Box 7606; Rt. 2, Bailey 27807		
Thompson, Henry E., (Cora), Hskp. Supv., Phys. Plant	3323	851-9743
Park Shops, Box 7219; 3221 Cynanne Cir., 27606		
Thompson, Dr. Lafayette, (Linda), Adj. Prof., Crop Sci.	469-1800	467-3035
1142 East Maynard Rd., Cary 27511; 462 Peeble Creek Dr., Cary 27511		
Thompson, Melody S., (Jimmy), Printing Unit. Supv., Univ. Graphics	3460	779-0621
Yarbrough at Morrison, Box 7226; 400 Thompson Rd., Garner 27529		
Thompson, Precious Paul, (Nettie M.), Ext. Soc. Spec., Ext.	2670	833-7886
Assoc. Prof., Soc.		
1305 Foxrun Dr., 27610		
Thompson, Roger L., (Giselle), Chemist, Food Sci.-USDA	2979	755-0707
323 Schaub, Box 7624; 1916 Alexander Rd., 27608		
Thompson, Dr. William F., Univ. Res. Prof., Bot.	2581, 2727	846-9030
137 Polk, Box 7612; 12705 Lindley Dr., 27614		

Name, Title, Department and Address	Office Phone	Resid. Phone
Thompson, William O., Agri'l. Res. Tech., Soil Sci.	3285	552-2766
3401 Williams, Box 7619; Rt. 2, Box 44, Holly Springs 27540		
Thompson-Jones, Mary, Lect., Engl.	3863	489-5420
208 Tompkins, Box 8105; 2601 Vineyard, Durham 27707		
Thomson, Dr. Christime E., Resid., Neurology, SVM	829-4200	
4700 Hillsborough St., Box 8401		
Thomson, Dr. Randall J., (Christine), Assoc. Prof., Soc. & Anth.	2491	851-7214
232 1911 Bldg., Box 8107; 1501 Lorimer Rd., 27606		
Thorne, Clarissa B., Agri'l. Res. Tech., Hort. Sci.	2685	851-2198
Hort. Sci. Grnhse., Box 7609; 225 Grand Ave., 27606		
Thorne, Lynn B., (Frank), Lect., Ec. & Bus.	2608	872-1093
220 B Patterson, Box 8109; 836 Green Ridge Rd., 27609		
Thorp, Marilyn J., Clk.-Typ., Phys. Plant	2180	
200 Morris, Box 7219		
Thorpe, Barbara A., Hskp. Asst., Phys. Plant	3323	833-2317
Park Shops, Box 7219; 111 Gregg St., 27601		
Thorpe, Dorothy M., Hskp. Asst., Phys. Plant	3323	
Park Shops, Box 7219; 1505 E. Jones St., 27610		
Thrall, Dr. Donald E., (Lucinda), Prof., Anat., Physiol. Sci. & Radiol., SVM	829-4292	821-4769
4700 Hillsborough St., Box 8401; 519 N. East St., 27604		
Threatt, Phil H., (Laurin), Agri'l. Res. Tech., Ent.	3579	362-5626
Research Annex, Box 7630; Rt. 4, Box 275, Apex 27502		
Threatt, Sarah F., Wordprocessor, Vet. Teach. Hosp., SVM	829-4200	
4700 Hillsborough St., Box 8401; 1706 Fairview Rd., 27608		
Throneburg, Kevin W., Res. Assoc., Text. Engr. & Sci.	3469	851-2214
B-8 Nelson, Box 8301; 1204A Athens Dr., 27606		
Thrower, James C., (Iva), Boiler Oper. Shift Supv., Phys. Plant	2184	553-6121
Heating Plant, Box 7219; 2108 Powell Dr., Clayton 27520		
Thrower, Rhonda C., Data Entry Oper., Dairy Rec. Proc. Ctr.	2075	779-4397
Leazar, Box 7623; 5001 Monk Dr., 27603		
Thurlow, Edwin G., (Grace), Prof. Emer., Lands Arch., Design		787-5611
638 Pine Ridge, 27609		
Thurman, Dr. Walter N., (Rita), Asst. Prof., Ec. & Bus.	2605	781-8332
4-A Patterson, Box 8109; 3429 Redbud Ln., 27607		
Tickel, William L., Analyst Programmer, Admn. Comp. Serv.	3640	851-1488
1212 Blue Ridge Rd., Box 7224; 5235-J Dana Dr., 27607		
Tidwell, John E., (Janet), Adj. Assoc. Prof., Civil Engr.		469-0981
208 Mann, Box 7908; 1200 Nottingham Dr., Cary 27511		
Tillage, Jessie W., Brick Const. Crew Supv., Phys. Plant	3408	828-6478
Sullivan Dr., Box 7219; 2808 Gladstone Dr., 27610		
Tilley, Dr. D. Ronald, (Anne), Prof., Physics	2512	489-4453
409 Cox, Box 8202; 3204 Pinafore, Durham 27705		
Tilley, Felton D., (Rose), Purch. Mgr., Purch. & Stores	2171	851-5069
200 Alumni, Box 7212; 1322 Kent Rd., 27606		
Tilman, Dr. Robert O., (Jo), Prof., Pol. Sci. & Pub. Admin.	2481	782-3403
226 Link Bldg., Box 8102; 2800 Wycliff Rd., 27607		
Tilton, Linda S., Sec., Hort. Sci.	3167	639-6450
214 Kilgore, Box 7609; Rt. 3, Box 70, Angier 27501		
Timothy, Dr. David H., (Marian W.), Prof., Crop Sci.	2657	834-5161
1203 Williams, Box 7620; 13 Furches St., 27607		
Tischer, Dr. Frederick J., (Alma), Prof. Emer., Elect. & Comp. Engr.	2336	787-9065
405 Daniels, Box 7911; 2312 Wheeler Rd., 27612		
Todd, Furney A., (Ann), Prof. Emer., Plant Path. Ext.	1-800-862-2229	365-7731
172 Lu Tom Ln., Wendell 27591		
Todd, Joanne L., Sec., Ec. & Bus.	3886	828-2386
220 Hillsborough Bldg., Box 8110; 22 Shepherd St., 27607		
Tolson, Linda S., Sys. Coord., Prov. Off.	2193	848-0899
202A Holladay, Box 7101; 7312 Grist Mill Rd., 27609		
Tomasino, Dr. Charles, (Pat), Prof., Text. Chem.	2551	787-8881
212 David Clark Labs, Box 8302; 4316 Oak Park Rd., 27612		
Tomaskovic-Devey, Dr. Donald T., (Barbara), Asst. Prof., Soc. & Anth.	3114	779-5524
324 1911 Bldg., Box 8107; 1803 Spring Dr., Garner 27529		

Name, Title, Department and Address	Office Phone	Resid. Phone
Tomlinson, Brenda C., Clk.-Typ., IES .....2356 215 Page, Box 7902; B9 Booker Dr., 27610		
Tomlinson, Clifton E., Grounds Wkr., Phys. Plant .....3408 Sullivan Dr., Box 7219; 10 Cascade Dr., Garner 27529		779-0110
Tomlinson, Glandora, Cash., Univ. Dining .....3270 Erdahl-Cloyd Annex, Box 7307		
Tomlison, Ola M., Hskp. Asst., Phys. Plant .....3323 Park Shops, Box 7219; 557 Newbern Ave., 27610		834-6009
Toms, Leandra S., (Curtis), Acct. Tech., Fund Acct. ....2149 213 Admn. Serv. Ctr., Box 7203; 1316 Swallow Dr., 27606		851-7826
Tonkonogy, Dr. Susan L., (Roger Clarke), Asst. Prof., Micro. Path. & Parasit., SVM .....829-4252 4700 Hillsborough St., Box 8401; 104 Firewood Cir., 27606		851-1218
Toole, Dr. William B., III, (Katie), Dean, Hum. & Soc. Sci. ....2467 106 Link Bldg., Box 8101; 2515 Kenmore Dr., 27608		782-1491
Tooley, Mark B., Ext. Spec., Ent. ....2703 3317 Gardner, Box 7613; 5706 Allwood Dr., 27606		821-5848
Toomey, Ruby P., (W. Glenn), Sec., Agri'l. Comm. ....3173 317 Ricks, Box 7603; 909 Warren Ave., Cary 27511		467-9944
Toon, Ledell, Hskp. Asst., Phys. Plant .....3323 Park Shops, Box 7219; 1208 Gatling St., 27610		821-3854
Tope, Dr. Nadine F., (Paul), Spec., Foods & Nutr., Agri'l. Ext. ....2770 F4 Ricks Annex, Box 7605; 6908 Justice Dr., 27609		847-0052
Toplikar, Susan, Assoc. Prof., Design .....3260 201B Leazar, Box 7701; 2615 Mayview Rd., 27607		833-8551
Topping, Judy A., Sec., Comp. Ctr. ....2517 M-2 Hillsborough Bldg., Box 7109; Rt. 2, Lot 112, Buffaloe Rd., Garner 27529		772-8815
Torquato, Dr. Salvatore, Assoc. Prof., Mech. & Aero. Engr. ....3241 4159 Broughton, Box 7910		
Toussaint, Dr. William D., (Eunice), Prof. Emer., Ec. & Bus. ....2258 18-C Patterson, Box 8109; 3421 Blue Ridge Rd., 27612		787-4028
Tove, Dr. Samuel B., (Sherry), Prof. & Head, Biochem. ....2581 126, 342 Polk, Box 7622; 2133 Buckingham Rd., 27607		787-6137
Traer, M. Evan "Tracy", Instr., Hort. Sci. ....3132 110 Kilgore, Box 7609; 3320 White Oak Rd., 27609		787-7787
Treble, Lorraine J., Vet. Tech., Vet. Teach. Hosp., SVM .....829-4200 4700 Hillsborough St., Box 8401; 4203 Western Blvd., 27606		851-5261
Trenbath, Sondra J., (Robert), Data Proc. Coord., Ec. & Bus. ....2885 314 Hillsborough Bldg., Box 8110; 1209 Sturdivant Dr., Cary 27511		469-2760
Trettien, Dr. Amy L., Resid., Dermatology, SVM .....829-4200 4700 Hillsborough St., Box 8401		
Trevino, Julie, Res. Tech., Plant Path. ....3488 2420 Gardner, Box 7616; 5301A Wayne St., 27606		851-1596
Trew, Dr. Robert J., (Diane), Assoc. Prof., Elec. & Comp. Engr. ....2336 431 Daniels, Box 7911; 601 Ellynn Dr., Cary 27511		469-0289
Triantaphyllou, Dr. Anastasios C., (Hedwig), Prof., Gen. ....2287 2525 Gardner, Box 7614; 106 Merwin Rd., 27606		851-4751
Triantaphyllou, Dr. Hedwig H., (Anastasios C.), Prof., Plant Path. ....2711 1417 Gardner, Box 7616; 106 Merwin Rd., 27606		851-4751
Trice, Brenda C., (Harold), Food Serv. Supv., Univ. Dining ....3963 Dining Hall, Box 7307; 1613 Procter Rd., 27610		833-5570
Tripp, Leslie R., (Gregory), Acct. Clerk, Pol. Sci. & Pub. Admin. ....2481 214 Link Bldg., Box 8102; 1108 Manchester Dr., Cary 27511		467-1634
Tripp, Miriam D., Dir., Telecomm. ....7046 Admn. Serv. Ctr. 2nd Floor, Box 7217; Rt. 3, Box 222, Chapel Hill 27514		933-6392
Trogdon, Maureen M., (Robert), Lab. Ani. Tech., Lab. Ani. Resou., SVM .....829-4201 4700 Hillsborough St., Box 8401; P.O. Box 33291, 27606		
Tronel-Peyroz, Mireille, Vis. Lect., For. Lang. ....2475 138 1911 Bldg., Box 8106; Q303 E.S. King Village, 27607		834-6314
Troost, Dr. Kay M., (Kris), Assoc. Prof., Soc. & Anth. ....3114 315 1911 Bldg., Box 8107; 805 W. South St., 27603		833-1265
Troutman, Rev. Craig, Moravian Chaplain, Coop. Campus Min. ....787-4034 3225 Darien Dr., 27607		787-4191

Name, Title, Department and Address	Office Phone	Resid. Phone
Troxler, Robert T., Asst. Prof., Ind. Arts, Occup. Educ. 300-M Poe, Box 7801; 304 Carolina Ave., 27606	2234	851-8681
Troy, Carlene, Data Entry Oper., Admn. Comp. Serv. 12 Peele, Box 7208; 127 Waldrop St., 27610	2459	821-1385
Troyer, Dr. James R., (Patricia), Prof., Bot. 2201 Gardner, Box 7612; 1556 Village Glen Dr., 27612	2228	781-7393
Trubey, Katherine C., (David), Lect., Math. 206 Harrelson, Box 8205; 413 Glasgow Rd., Cary 27511	7884	467-0714
Truesdale, Michael B., Plumber, Phys. Plant Armory Shop, Box 7219; 812 Whitmore Dr., 27612	3080	828-5416
Truex, Doreen Y., Admn. Sec., Phys. Plant 100 Morris, Box 7219	2181	
Truitt, Carol A., Recept., Athl. Case Athl. Ctr., Box 8501; 2405 Tyson St., 27612	2101	787-4569
Truitt, Frances C., Sec., Wolfpack Club College Inn, Box 8602; 2405 Tyson St., 27612	2112	787-4569
Trussell, Dr. H. Joel, (Pat), Assoc. Prof., Elec. & Comp. Engr. 311 Daniels, Box 7911; 6600 Clinton Pl., 27607	2336	851-2892
Tuck, Paul D., Lab. Tech., Ani. Sci. 120 Leazar, Box 7621; 2409 Derby Dr., 27610	2822	828-1304
Tucker, Dan C., (Pat), Biomed. Photo., Biomed. Comm. Ctr., SVM 4700 Hillsborough St., Box 8401; Rt. 3, Box 192-3, Apex 27502	829-4206	362-6072
Tucker, Dr. Harry Jr., (Mathilda), Assoc. Prof., For. Lang. 135 1911 Bldg., Box 8106; 510 Burton St., 27608	2475	834-8639
Tucker, John A. K., Vis. Const. Ext. Spec., Civil Engr. 213 Mann, Box 7908; 4721-B Walden Pond Dr., 27604	2331	876-9700
Tucker, Dr. Paul A., Jr., (Lynn), Prof., Text. Mgmt. & Tech. B49 Nelson, Box 8301; 3412 Ocotea Dr., 27607	3469	782-7489
Tucker, V. Jane, Art.-Illus., Campus Plan. & Const. 219 Oberlin Rd., Box 7216; 3931 Paddington Ct., 27612	2121	787-5790
Tucker, Dr. William P., (Jane), Prof. & Asst. Head, Chem. 108 Dabney, Box 8204; 4016 Ebenezer Church Rd., 27612	2546	781-8264
Tudor, Hazel G., (Worth, Jr.), Registrar, Design 200 Brooks, Box 7701; 107 Sycamore St., Cary 27511	2202	467-8404
Tung, Dr. Chi C., (June), Prof., Civil Engr. 318 Mann, Box 7908; 4133 Picardy Dr., 27612	2331	781-9566
Turinsky, Dr. Paul J., (Karen), Prof. & Head, Nuc. Engr. 1110-B Burlington, Box 7909; 421 Emerywood Dr., 27609	2301	847-8235
Turlington, Betsy F., (Richard), Sec., Foods & Nutr., Agri'l. Ext. F-4 Ricks Annex, Box 7605; 6024 Windham Dr., 27609	2770	847-5857
Turlington, Leon G., (Lynn), Agri'l. Res. Tech., Hort. Sci. 59 Kilgore, Box 7609; 207-H Johnson St., Garner 27529	3346	772-8448
Turnbull, Dr. Marianne M., Health Educ., Health Serv. Clark Inf., Box 7304; 400 Oak Ridge Rd., Cary 27511	2564	467-5713
Turner, Beth E., (Lynn), Res. Analyst, Food Sci. 331 Schaub, Box 7624; 832 Valerie Dr., 27606	2974	851-6956
Turner, Dr. Carl B., (Alison), Prof., Ec. & Bus. 220-A Patterson, Box 8109; 6800 Candlewood Dr., 27612	2608	848-8234
Turner, David W., (Charlene), Sr. Stat., Stat. 614-A Cox, Box 8203; 2612 Barmettler St., 27607	2531	828-8180
Turner, Delores M., Hskp. Supv., Phys. Plant Park Shops, Box 7219; 1810 Cartwell Ct., 27610	3323	832-1173
Turner, Emmett M., (Judy), Mail Clk., Phys. Plant Leazar, Box 7219; 513 Bailey Dr., 27610	3974	834-0272
Turner, Kathy W., (Johnny), Purch. Asst., SVM 4700 Hillsborough St., Box 8401; Rt. 1, Box 57-1, Apex 27502	829-4209	362-0341
Turner, Dr. Lynn G., (Beth), Assoc. Prof., Food Sci. 218 Schaub, Box 7624; 832 Valerie Dr., 27606	2968	851-6956
Turner, N. Charlene, (David), Clerical-Supv., Engl. 246 Tompkins, Box 8105; 2612 Barmettler St., 27607	3870	828-8180
Turner, Ricky R., (Janice), Vehicle Oper., Phys. Plant Park Shops, Box 7219; 412 Peyton St., 27610	3323	834-7706
Turner, Robert M., (Karen), Dir., Admis. & Transfers, Engr. 115 Page, Box 7904; 1105 Ashford Ln., Cary 27511	3263	467-0659

Name, Title, Department and Address	Office Phone	Resid. Phone
Turner, Dr. William L., (Marjorie), Vice Chan. for Ext. & Pub. Serv. 200 McKimmon, Box 7401; 3337 Thomas Rd., 27607	2144	787-0662
Turner, William R., (Rosa), Mail Clk., Phys. Plant Leazar, Box 7219; 1401 Hazelnut Dr., 27610	3974	
Turner, Zola A., Res. Tech., Ani. Sci. Reprod. Phys. Lab., 1400 Blue Ridge Rd., Box 7621; Rt. 10, Banks Rd., Box 303A, 27603	3849	779-3758
Turschmann, David J., Res. Assoc., Urb. Aff. 261 McKimmon, Box 7401; 1009-H Village Greenway, Cary 27511	2578	481-4228
Tuten, Jennifer O., Sec., Physics 400 Cox, Box 8202; 4005 Pepperton Dr., 27606	2512	
Tutor, James C., Engr. Tech., Bio. & Agri'l. Engr. 136 Weaver, Box 7625; Rt. 2, Box 46A, Fuquay-Varina 27526	3101	552-6497
Tutterow-Jennings, Dr. Harriet T., Clothing Spec., Home Ec. Agri'l. Ext. Serv. F-1 Ricks, Box 7605	2770	
Tuttle, Beth K., (Robert), Clk.-Typ., Admis. 112 Peele, Box 7103; 812 Cowper Dr., 27608	2437	829-1673
Tuttle, Carolyn T., Analyst Programmer, Comp. Ctr. 1306 Library, Box 7109; 5813 Maple Ridge Rd., 27609	2517	872-5643
Tuttle, Joseph C., (Linda), Librn., Text. Libr. 112 Nelson, Box 8301; 5464 Pine Top Circle, 27612	3043	787-7514
Tyczkowski, Dr. Juliusz K., (Krystyna), Res. Assoc., Poul. Sci. 228 Scott, Box 7608; 903 Aversboro Rd., Garner 27529	2623	772-2490
Tyczkowski, Dr. Krystyna, (Juliusz), Supv., Clin. Pharm. Lab., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 903 Aversboro Rd., Garner 27529	829-4200	772-2490
Tyson, Jeannette, Hskp. Asst., Phys. Plant Box 7219; 1143 Walnut St., 27601	3323	
Tyson, Nancy K., Admn. Asst., Engr. Res. Progs. 224 Page, Box 7903; 316 Perry St., 27608	2345	832-3287

U

Uhlinger, Dr. Christine, Asst. Prof., Food Ani. & Equ. Med., SVM 4700 Hillsborough St., Box 8401; 1706 Burnley Dr., Cary 27511	829-4378	362-1345
Ulberg, Dr. Lester C., (Margaret), WNR Prof. Emer., Ani. Sci. 812 Ravenwood Dr., 27606		851-4247
Ulrich, Dr. David F., (Vivian), Assoc. Prof., Math. 310 Harrelson, Box 8205; 1617 Glenwood Ave., 27608	7140	832-6108
Ulmschneider, John E., Head, Libr. Sys. 2312 Library, Box 7111	2339	
Umphey, Mary, Food Serv. Asst., Univ. Dining Dining Hall, Box 7307	3963	
Umstead, Carlisle P., (Daphene), Agri'l. Res. Tech., Plant Path. 2408 Gardner, Box 7616; 2800 Bedford Ave., 27607	2721	
Umstead, Dr. Jacqueline A., Resid., Theriogenology, SVM 4700 Hillsborough St., Box 8401	829-4200	
Underwood, Doreen G., Asst. to Dir., Craft Ctr. Lower Level, Thompson Bldg., Box 7305; P. O. Box 73, Cary 27511	2457	467-1928
Underwood, Dr. Herbert A., Prof., Zool. 1611 Gardner, Box 7617; 1230 Suffolk Ct., Cary 27511	3838	469-9834
Underwood, Kay D., Lab. Ani. Tech., Lab. Ani. Resou., SVM 4700 Hillsborough St., Box 8401; 206 Winston Dr., Cary 27511	829-4201	469-5370
Underwood, Martha, Res. Tech., Food Ani. & Equ. Med., SVM 4700 Hillsborough St., Box 8401; 2609 Mayview Rd., 27607	829-4200	833-7194
Underwood, Peggy W., (Roger), Sec., IES 203 Page, Box 7902	2356	
Underwood, William R., (Sue), Elect. Supv., Phys. Plant Armory Shop, Box 7219; 904 Pond St., Clayton 27520	3080	553-6607
Unrath, Dr. C. Richard, (Marjorie), Prof., Pomology, Hort. Sci. Mtn. Hort. Crops Res. Stat., 2016 Fanning Bridge Rd., Fletcher 28732-9628 ... Rt. 1, Box 90, Banner Elk 28604		704-684-3562 704-898-9273

Name, Title, Department and Address	Office Phone	Resid. Phone
Upchurch, Jimmy W., Farm Supv., Univ. Res. Unit 2 3720 Lake Wheeler Rd., Box 7601; Rt. 4, Box 102, Apex 27502	7259	362-7350
Upchurch, Peggy F., (Jimmie W.), Sec., Chem. Engr. 116 Riddick, Box 7905; Rt. 4, Box 102, Apex 27502	2460	362-7350
Upchurch, Robert E., (Cheryl), Plumber, Phys. Plant Armory Shops, Box 7219; Rt. 1, Box 35-D, Knightdale 27545	3080	266-0705
Upchurch, Walter, (Debra), Lab. Mech., Poul. Sci. Univ. Res. Farm 2, Box 7608; 5217 Penny Rd., 27606	3841	839-0118
Upchurch, Woody, Sr. News Ed., Agri'l. Comm. 317 Ricks, Box 7603; Rt. 3, Box 7, Angier 27501	3173	639-6717
Uddike, Dr. Susan J., Asst. Prof., Anat., Physiol. Sci. & Radiol., SVM 4700 Hillsborough St., Box 8401; 1123 Manchester Dr., 27511	829-4284	467-5335
Usry, Mary F., Asst. Dir., Fin. Aid 213 Peele, Box 7302; 2810 Mayview Rd., 27607	2422	833-5185
Usry, Robert H., (Shirley), Ext. Econ. Spec., Ec. & Bus. 211 Hillsborough Bldg., Box 8110; 3001 Devonshire Dr., 27607	3893	787-9403
Utle, Julia D., (Floyd), Data Entry Oper., Dairy Rec. Proc. Ctr. Leazar, Box 7623; 911 Frances Dr., Garner 27529	2075	779-0768
Utle, Thelma T., (Bobby L.), Typ., Bio. & Agri'l. Engr. 175 Weaver, Box 7625; Rt. 3, Box 211-A, Fuquay-Varina 27526	3121	
Uyanik, Dr. Mehmet E., (Virginia), Prof. Emer., Civil Engr. 311 Mann, Box 7908; 3516 Andrews Ln., 27607	2331	787-4718
Uytterhoeven, Washington H., (Nilda), Elect. Tech., Phyt. 2003 Gardner, Box 7618; 5020 Kaplan Dr., 27606	2778	851-2574
Uzzell, Dr. Odell, (Esther), Prof., Soc. & Anth. 327 1911 Bldg., Box 8107; 759 Chadwick Rd., Fayetteville 28301	3114	488-8991
V		
Vaca, Elga M., Sec., Ext. For. Resou. 3028 A Biltmore, Box 8003	3386	
Vaden, Dr. Shelly L., Resid. Sm. Ani. Int. Med., SVM 4700 Hillsborough St., Box 8401	829-4200	
Valentine, Ann H., Acct. Clk., Stu. Publ. 3134 Univ. Stu. Ctr., Box 7306; 101 Upton Circle, Garner 27529	2413	772-7903
Valentine, Karen S., (Jay), Tech. Writer, Biomed. Comm. Ctr., SVM 4700 Hillsborough St., Box 8401	829-4206	
Valentine, Lucy M., Food Serv. Asst., Univ. Dining Univ. Stu. Ctr., Box 7307; Rt. 2, Box 70, Knightdale 27545	2021	266-3550
Valvano, James T., (Pam), Dir., Athl. Case Athl. Ctr., Box 8501; 408 Glasgow Rd., Cary 27511	2104	
van Breemen, Dr. Richard B., Asst. Prof., Chem. 539 Dabney, Box 8204; 3508 Palm Ct., Apt. 302, 27607	2942	783-5746
Van Camp, Dr. Steven D., (Elaine Hunt), Asst. Prof., Food. Ani. & Equ. Med., SVM 4700 Hillsborough St., Box 8401; 1216 Kingston Ridge, Cary 27511	829-4244	467-6080
Vandenbergh, Dr. John G., (Barbara), Prof. & Head, Zool. 2124 Gardner, Box 7617; 3424 Huckabay Cir., 27612	2741	781-2163
Vandergrift, Paul F., Dir., Educ. Serv., UNC Ctr. for Pub. TV 220 TV Ctr., Box 8601	3604, 3607	
VanderKam, Dr. James C., (Mary), Prof., Rel., Phil. & Rel. G116A Winston, Box 8103; 2217 Lash Ave., 27607	3214	781-9095
van der Vaart, Dr. H. Robert, Drexel Prof. & Prof., Stat., Math. & Biomath., Stat. 513-B Cox, Box 8203; 1212 Brooks Ave., 27607	2271	787-6133
Vander Wall, Dr. William J., Asst. Prof., Graphic Comm., Occup. Educ. 510-E Poe, Box 7801; 707 Rosemont Ave., 27607	2234	828-4206
VanDeVeer, Dr. A. Donald, Prof., Phil., Phil. & Rel. G116 Winston, Box 8103; 3700 Camley Ave., 27612	3214	782-5264
Van Duyn, Dr. John W., (Gwen), Prof., Ent. Tidewater Res. Sta., Rt. 2, Plymouth 27962; Rt. 4, Box 300, Windsor Woods, Edenton 27932	793-4118	482-8185

Name, Title, Department and Address	Office Phone	Resid. Phone
Van Dyke, Dr. C. Gerald, (Susan), Assoc. Prof., Bot. 4205 Gardner, Box 7612; 1612 Lorraine Rd., 27607	2222	782-3458
van Eys, Dr. Johannes, E., Vis. Asst. Prof., Ani. Sci. 243 Polk, Box 7621; 608 Fox Chase Ct., 27606	2766	859-1153
Vanhoy, Angie K., Lab. Ani. Tech., Lab. Ani. Resou., SVM	829-4201	755-1486
4700 Hillsborough St., Box 8401; 2820 Everett Ave., 27607		
Van Stee, Dr. Ethard W., Adj. Assoc. Prof., Anat., Physiol. Sci. & Radiol., SVM		
Box 8401		
Vasu, Dr. Ellen S., (Michael), Asst. Prof., Curr. & Inst.	3221	467-7163
402-N Poe, Box 7801; 927 Manchester Dr., Cary 27511		
Vasu, Dr. Michael L., (Ellen), Assoc. Prof. & Dir., Soc. Sci. Res. & Comp. Lab. Pol. Sci. & Pub. Admin.	2481	467-7163
221G Winston, Box 8102; 927 Manchester Dr., 27511		
Vaughan, Debra W., (Bennie), Acct. Tech., Agri'l. Res. Admin.	2714	467-4738
108 Patterson, Box 7601; 103 Thresher Ct., Cary 27511		
Vaughn, David D., Equip. Mgr., Athl.	3956	859-3031
146 Weisiger-Brown Athl. Fac., Box 8502; 5001 Ft. Sumter Rd., 27606		
Venkatesh, Dr. Krishnappa, (Lalitha), Res. Assoc., Ent.	3771	859-1977
2327 Gardner, Box 7613; 5415F Dana Dr., 27606		
Vepraskas, Dr. Michael J., (Claudia), Assoc. Prof., Soil Sci.	2600	787-7014
3413 Williams, Box 7619; 3626 Rock Creek Dr., 27609		
Verghese, Dr. Kuruvilla, (Margrith), Prof., Nuc. Engr.	3929	467-1922
2102 Burlington, Box 7909; 1228 Kingston Ridge Rd., Cary 27511		
Vess, David O., (Leta), Instr., Text. Mgmt. & Tech.	3442	832-0433
304 Nelson, Box 8301; 4404 Yates Mills Pond Rd., 27606		
Vess, Robert J., (Joan), Lect., Lab. Coord., Mech. & Aero. Engr.	3024	821-7284
2219 Broughton, Box 7910; 2534 Noble Rd., 27608		
Vester, Lee, (Phyllis), Dupl. Oper., Agri'l. Comm.	2791	851-8896
13 Ricks, Box 7603; 4816A Bluebird Ct., 27606		
Vick, Vickie S., (Barry), Acct. Clk., Dean's Off., Hum. & Soc. Sci.	2467	494-5559
106 Link, Box 8101; Rt. 1, Box 304-A, Franklinton 27525		
Vickers, Thelma S., (Vic), Sec., Engr.	2345	876-5782
224 Page, Box 7901; 3200 Huntleigh Dr., 27604		
Vickers, Victor G., (Thelma), Sys. Acct., Contr. & Grants	2153	876-5782
Leazar, Lower Level, Box 7214; 3200 Huntleigh Dr., 27604		
Vickery, Dr. Kenneth P., (Catherine Alguire), Assoc. Prof., Hist.	2485	834-8306
102 Harrelson, Box 8108; 602 N. Boundary, 27604		
Villachica, Dr. J. Hugo, (Maria Luisa), Vis. Assoc. Prof., Co.-Ldr., Nat'l. Selva Prog., Soil Sci.	2838	
Box 7619; Apartado 248, Lima 100, Peru		
Villeneuve, Lynda C., Clk.-Typ., Accts. Pay	3367	833-3345
213 Admn. Serv. Ctr., Box 7204; 436 Grissom St., 27603		
Vincent, Dr. K. Steven, (Sue), Assoc. Prof., Hist.	2484	266-4546
133 Harrelson, Box 8108; Rt. 2, Box 27B, Knightdale 27545		
Vinson, Sharon L., (Isaac), Sec., Phys. & Math. Sci.	7865	553-4226
117 Cox, Box 8201; 2601 Amelia Rd., Clayton 27520		
Vogel, Allyn K., Soc. Res. Assoc., Urb. Aff.	2578	833-7758
264 McKimmon, Box 7401; 2724 Barmettler, 27607		
Vogel, Dr. Phyllis H., (Chet), Asst. Dir., Music	2981	787-8750
212 Price Music Ctr., Box 7311; 308 Lake Boone Tr., 27607		
Vohs, Karen M., Res. Asst., Text. Engr. & Sci.	3074	834-8256
B-5A Nelson, Box 8301; 2501-B Kilgore Ave., 27607		
Voland, Dr. Maurice E., (Ellen), Prof. & Spec. In Charge, Ext. Soc.	2670	782-7716
238 1911 Bldg., Box 8107; 1009 Collins Dr., 27609		
Volk, Dr. Richard J., (Barbara), Prof., Soil Sci.	2389	851-1975
3114 Williams, Box 7619; 1609 Pineview Dr., 27606		
Vose, Donyelle L., (James), Rad. Therapy Tech., Vet. Teach. Hosp., SVM	829-4200	
4700 Hillsborough St., Box 8401; 1835 Hilton St., Apt. B, 27608		
Vouk, Dr. Mladen A., (Maja), Asst. Prof., Comp. Sci.	7886	859-1838
131-B Daniels, Box 8206; 604 Charleston Rd., 2G, 27606		

Name, Title, Department and Address	Office Phone	Resid. Phone
Voyles, Carolyn S., (Eddie), Acct. Tech., Payr. & Ben.	2151	847-4503
Admn. Serv. Ctr., Box 7215; 11036 Creedmoor Rd., 27614		
Vreeland, Dr. Carol E., Res. Tech., Ani. Sci.	3319	
1147 Grinnells, Box 7626		
Vuke, T. M., (Darlene), Res. Analyst, Bot.	3525	
1231 Gardner, Box 7612; 100 Meadow Run, Knightdale 27545		

W

Wade, Connie W., Data Entry Oper., Agri'l. Ext.	2983	772-1060
110 Brooks Ave., Box 7602; 5804 Conly Dr., 27603		
Wade, James A., Agri'l. Res. Tech., Soil Sci.	3288	851-7438
1325 A Williams, Box 7619; 1000 Powell Dr., 27606		
Wade, Mary W., (Donald), Clk-Typ., Chem. Engr.	2324	772-2468
113 Riddick, Box 7905; 1210 Poplar Ave., Garner 27529		
Wade, Dr. Michael K., (Anne), Vis. Asst. Prof., Soil Sci.	2838	
Box 7619; Centre for Soils Res.; J1 Juanda 98, Bogor, Indonesia		
Wade, Nancy R., (Jimmy), Acct. Clk., Central Stores	2198	851-7438
Sullivan Dr., Box 7225; 1000 Powell Dr., 27606		
Wadsworth, Shirley G., Sec., Trans.	3424	772-7214
Admn. Serv. Ctr., Box 7221; 4403 Susan Dr., 27603		
Wafa, Dorria M., Vis. Scientist, Ent.	2274, 2275	
Unit IV, Method Rd., Box 7633		
Wages, Dr. Dennis P., (Vicky), Asst. Prof., Food Ani. & Equ. Med., SVM	829-4282	469-2863
4700 Hillsborough St., Box 8401; 1430 Debra Dr., Cary 27511		
Wagner, Dr. Michael G., Asst. Prof., Crop Sci.	3331	286-2313
4215-A Williams; 2222 W. Club Blvd., Durham 27705		
Wagner, Dr. Frances J., (Frank), Ext. Prof. Emer., Human Dev. Spec. Emer. Agri'l. Ext. Serv.	2770	787-2024
F-2 Ricks, Box 7605; 4400 Boxwood Rd., 27612		
Wagner, Steven W., Farm Supv., Univ. Res. Unit 1	851-4868	269-6362
4616 Reedy Creek Rd., Box 7621; 121 E. McIver St., Zebulon 27597		
Wagoner, Fred H., (Dot), 4-H Spec. Emer., Agri'l. Ext. & 4-H	982-3517	787-6268
Rt. 2, Box 40-B, Laurel Springs 28644; 1318 Lutz Ave., 27607		
Wahab, Annette P., Purch. Off., Purch. & Stores	2171	
204 Alumni, Box 7212; 107 Rockspray Ct., Cary 27511		
Wahab, Joyce M., (Allen), Sec., Fin. Off. Sys. Staff	3640	467-8491
1212 Blue Ridge Rd., Box 7227; 811 Prince St., Cary 27511		
Wahl, Dr. George H., Jr., (Suzanne), Prof., Chem.	2941	787-8916
527-A Dabney, Box 8204; 2405 Wentworth St., 27612		
Wahls, Dr. Harvey E., (Margy), Assoc. Head, Grad. Prog., Civil Engr.	2331	787-0585
201A Mann, Box 7908; 4712 Glen Forest Dr., 27612		
Walden, Dr. Michael L., (Mary), Assoc. Prof., Ec. & Bus.	2258	851-8334
18-G Patterson, Box 8109; 601 Glen Mill Ct., 27606		
Walek, Dr. Mary L., Assoc. Prof. & Asst. Head, Soc. & Anth.	3114	872-9684
306 1911 Bldg., Box 8107; 1413 Elberon Pl., 27609		
Walgenbach, Dr. James F., Asst. Prof., Ent.	704-684-3562	
2016 Fanning Bridge Rd., Fletcher 28732-9628		
Walker, Alice W., (Steve), Res. Tech., Micro., Path. & Parasit., SVM	829-4347	859-1582
4700 Hillsborough St., Box 8401; 4249 The Oaks Dr., 27606		
Walker, Bennie, Jr., Food Serv. Asst., Univ. Dining	3963	556-1942
Dining Hall, Box 7307; 603 East Perry St., Wake Forest 27587		
Walker, Edward, Bookstack Supv., Circ. Sorting	3364	832-1735
1214-A Library, Box 7111; 2300 Fire Run Ct., 27610		
Walker, Elijah S., Hskp. Supv., Phys. Plant	3323	834-3163
Park Shops, Box 7219; G-13 Washington Terr., 27610		
Walker, Faye C., Clk. Recept., Dean's Off., Hum. & Soc. Sci.	2467	872-1288
106 Link Bldg., Box 8101; 3000-20 Stony Brook Dr., 27604		
Walker, Herman (Sonny) P., Clk.-Typ., Athl.	2102	872-1288
Case Athl. Ctr., Box 8501; 3000-20 Stony Brook Dr., 27604		

Name, Title, Department and Address	Office Phone	Resid. Phone
Walker, Dr. Joan L., (Griffin), Res. Assoc., Crop Sci. 3127 Ligon St., Box 7631; 1420 Lake Dam Rd., 27607	3905	851-9582
Walker, Mary F., Acct. Tech., For. Resou. 2028B Biltmore, Box 8001; 1600 Pineview Dr., 27606	2883	851-0515
Walker, Mvrtle V., (Elijah), Hskp. Asst., Phys. Plant Park Shops, Box 7219; G-13 Washington Terr., 27601	3323	834-3163
Walker, Dr. N. William, (Kay), Assoc. Prof., Psy. 628-A Poe, Box 7801; O'Kelly Chapel Rd., Rt. 3, Box 219-M, Durham 27713	2253	942-2064
Walker, Norma M., (Steve), Sec., Lab. Ani. Resou., SVM 4700 Hillsborough St., Box 8401; 5813 Dutch Creek Dr., 27606	829-4280	362-5525
Walker, Richard, (Virginia), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 214 Hedo St., 27610	3323	833-8827
Walker, Dr. Richard L., (Deidre), Asst. Prof., Micro., Path. & Parasit., SVM 4700 Hillsborough St., Box 8401; 137-A Hunt Club Ln., 27606	829-4379	851-4223
Walker, Sam, Hskp. Asst., Phys. Plant Park Shops, Box 7219	3323	821-7460
Walker, Sandra K., Agri'l. Res. Tech., Plant Path. 2506 Gardner, Box 7616; 2119½ Fairview Rd., 27608	2735	755-1537
Walker, Sara O., Wordprocessor, Hort. Sci. 224 Kilgore, Box 7609; Rt. 4, Box 228, Lillington 27546	3167	893-3839
Walker, Serita J., Clk.-Recept., Admis. 112 Peele, Box 7103; 710 Shearin St., Rocky Mount 27801	2434	
Walker, Sharon S., Sec., Comp. Stud. 318 Daniels, Box 8207; 2737 Newbold St., 27603	2654	833-6280
Walker, Susan H., Clk. Recept., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401	829-4200	
Walker, Terry S., (Gay), Hosp. Administrator, Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 402 Hickory St., Cary 27511	829-4290	467-0971
Walker, Virginia, (Richard), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 2114 Heck St., 27601	3323	833-8827
Wall, Carolyn J., (Edward), Clk.-Typ., Admis. 107 Peele, Box 7103; Rt. 10, Box 10, 27603	2433	779-1633
Wall, Catherine H., Acct. Tech., Payr. Ben. Admn. Serv. Ctr., Box 7215; 1204 Bentley Ln., 27610	2151	828-8004
Wall, Daniel T., (Sue), Agri'l. Res. Tech., Crop Sci. 4237 Williams, Box 7620; 1105 Somerset Rd., 27610	3216	821-2394
Wall, Elaine F., (O. Glenn), Sec., Engr. 116 Page, Box 7904; 1500 Westchester Rd., 27610	3693	833-7240
Wall, Gary E., Lect., Phys. Educ. 2048 Carmichael, Box 8111; 6020 Farm Gate Rd., 27606	2487	851-9269
Wall, Jacqueline Y., Clk.-Typ., Fin. & Bus. B Holladay, Box 7201; 212 New Rand Rd., Garner 27529	2155	779-1299
Wall, Dr. John N., Jr., (Terry), Assoc. Prof., Engr. 252 Tompkins, Box 8105; 309 Hillcrest Rd., 27605	3870	832-3055
Wall, Melanie R., Sales Clk., SSS SSS, Box 7224; 2760 Knowles St., 27603	2161	833-7966
Wall, Shelby E., Lithographer, Univ. Graphics Sullivan Dr., Box 7226; Rt. 3, Box 49, Garner 27529	2131	799-6854
Wallace, Barbara M., Sec., Arch. Prog. 200 Brooks, Box 7701	2204	
Wallace, Deborah K., (Michael), Purch. Asst., Central Stores Sullivan Dr., Box 7225; 107 Queensbury Ct., Garner 27529	7810	779-1150
Wallace, Dr. James (Tim) M., (Sandy), Assoc. Prof., Soc. & Anth. 229 1911 Bldg., Box 8107; 1213 Filmore St., 27605	2491	828-3264
Wallace, Linda D., Clk.-Typ., Admis. 107 Peele, Box 7103; 2205 Kornegay Dr., 27603	2433	779-2075
Wallace, Mary A., (Wesley C.), Acct. Tech., Contr. & Grants Leazar, Box 7214; 1200 Glenwood Ave., 27605	2153	829-0842
Wallace, Dr. Robert. Asst. Prof., For. Lang. 134 1911 Bldg., Box 8106; 219 Dacian Ave., Durham 27701	2475	682-3934
Wallace, Sherwood G., Lab. Mech., Text. Engr. & Sci. 222 Nelson, Box 8301; 1421 Ashburton Rd., 27606	3076	851-1238

Name, Title, Department and Address	Office Phone	Resid. Phone
Wallace, T. Michael, (Susan), Asst. Prog. Dir., Univ. Stu. Ctr. 3114 Univ. Stu. Ctr., Box 7306; 5001 Dantree Pl., 27609	2451	781-5239
Walser, Richard G., Prof. Emer., Engl. 5222 Library, Box 8105; 3929 Arrow Dr., 27612	3014	787-4771
Walsh, Mary E., (Ed), Sec., N. C. Japan Ctr. 5 Rosemary St., Box 8112; 4712 Cedarfield Dr., 27606	3450	851-3509
Walsh, Dr. William K., (Josie), Assoc. Dean, Text. Res. & Grad. Stud. 107-B Nelson, Box 8301; 208 Forest Rd., 27605	3057	828-8815
Walter, Dr. William M., Jr., (Kathryn), Prof., Food Sci.-USDA 322-F Schaub, Box 7624; 2128 Cowper Dr., 27608	2990	787-9328
Walters, Dr. Jeffrey R., (Beverly), Asst. Prof., Zool. 3107 Gardner, Box 7617; 715 Spring St., Cary 27511	2741	469-2067
Walters, Mary A., Vet. Tech., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401; 718 Braniff Dr., Cary 27511	829-4200	467-2508
Waltner, Dr. Arthur W., (Nellie), Prof., Physics 411 Cox, Box 8202; 1204 Westmoreland Dr. 27612	2512	787-5582
Waltner, Nellie L. (Arthur), Asst. Dir., Tech. Serv. 1137 Librarv. Box 7111; 1204 Westmoreland Dr. 27612	2841	787-5582
Walton-Fairey, Barbara, Vet. Tech., Vet. Teach. Hosp., SVM 4700 Hillsborough St., Box 8401	829-4200	
Walton, Gwendolyn, J., Data Control Clk., Dairy Rec. Proc. Ctr. Leazar, Box 7623; 5338 Olive Rd., 27606	2074	851-4660
Walton, Marie P., (Thomas), Clk.-Typ., Food Sci. 236 Schaub, Box 7624; Rt. 10, Box 543-A, 27603	2964	772-0164
Walton, Milton, Hskp. Supv., Phys. Plant Park Shops, Box 7219	3323	
Walton, Phillip, (Sarah), Bind. Equip. Oper., Univ. Graphics Sullivan Dr., Box 7226; 2228 Dorsette Dr., 27603	2131	833-2311
Walton, Thomas F., Comp. Programmer, Comp. Graphics Ctr. Res. Annex West, Box 7106; 417½ S. Boylan Ave., 27603	2669	832-8491
Walton, Vicki S., (Judson), Sec., Soil Sci. 2234 Williams, Box 7619; Rt. 10, Box 252-C, 27603	2655	772-3721
Wanchock, Raymond E., Book Sales Supv., Book Div. SSS, Box 7224; 5013 Western Blvd., 27606	3117	851-2106
Wang, Fu Tseng, Asst. Stat., Stat. 513-E Cox, Box 8203; 13 Bagwell Ave., 27607	2271	833-9108
Wang, Janiffer Y., (David), Comp. Programmer, Admn. Comp. Serv. B 21 Hillsborough Bldg., Box 7209; 1808 Southwood Dr., Durham 27707	3541	493-9201
Wang, Dr. Shun-cheng, Vis. Scientist, Ent. Unit IV, Method Rd., Box 7633	2275, 2274	
Ward, Ann B., Head, Interlibr. Ctr. 1133 Library, Box 7111; 206 Shephard St., 27607	2116	755-0494
Ward, Barbara A., (Morris), Acct. Clk., Agri'l. Life Sci. Admin. 120 Patterson, Box 7601; Rt. 1, Box 1A, New Hill 27562	2716	362-6922
Ward, Donna G., Tech. Typ., Math. 242 Harrelson, Box 8205; 540 Marble St., 27603	2384	
Ward, Eleania B., Asst. Dir., Music 210 Price Music Ctr., Box 7311; 2429 Derby Dr., 27610	2981	
Ward, Dr. James B., (Laura), Prof., Poul. Sci. Ext. 205 Scott, Box 7608; 4916 Richland Dr., 27612	2621	787-8602
Ward, Kaye B., (Mickey), Admn. Sec., Inst'l. Res. 202 Peele, Box 7002; 110 Strickland Dr., Smithfield 27577	2776	934-5560
Ward, Laviece C., Lect., Engl. 106 Tompkins, Box 8105; 1402 Gorman St., 27606	3854	755-0325
Ward, M. Candice, Lect., Engl. 207 Tompkins, Box 8105; 1504 Edgevale Rd., Durham 27701	3863	682-8569
Warren, Alice Strickland, (Kim), Spec., Con. Educ. 147-E McKimmon Ctr., Box 7401; 315 Dunhagan Pl., Cary 27511	2261	469-2119
Warren, Anne H., (David A.), Clk.-Typ., Grad. Sch. 104 Peele, Box 7102; 104 Todd St., Cary 27511	2871	469-8256
Warren, Ciscero, Security Guard, Phys. Educ. 1217E Carmichael, Box 8111; 130 Lincoln Ct., 27610	3508	755-1161
Warren, David L., Libr. Technical Asst., Monographic Cat. 1121 Library, Box 7111; 2502 Clark Ave., #1, 27607	2603	

Name, Title, Department and Address	Office Phone	Resid. Phone
Warren, Donna S., (Terry), Sec., Agri'l. Ext. Serv.	2789	467-3733
307 Ricks, Box 7604; 1607 Laughridge Dr., Cary 27511		
Warren, Dr. Frederick G., (Jo), Prof. Emer., Food Sci.		787-5116
Box 7624; 1339 Brooks Ave., 27607		
Warren, Jo, Admn. Mgr., Text.	3077	851-2062
33 Nelson, Box 8301; 5931 Westcreek Pl., 27606		
Warren, Leon S., Jr., (Betty), Agri'l. Res. Tech., Crop Sci. Ext.	3652, 2866	779-5775
3123 Ligon St., Box 7627; Rt. 1, Box 140, Apex 27502		
Warren, Dr. M. Roger, (Arameta), Prof. & Head, Rec. Resou. Admin.	3276	787-8783
4008-C Biltmore, Box 8004; 4304 Boxwood Rd., 27612		
Warren, Samson, Jr., Lab. Supv., Comp. Sci.	2500	594-0472
348 Daniels, Box 8206; Rt. 1, Box 12, Newton Grove 28366		
Warren, Dr. Stewart L., Asst. Prof., Hort. Sci.	704-684-3562	
Mtn. Hort. Crops Res. Station, 2061 Fanning Br. Rd., Fletcher 28732-9628		
98 Woods Edge Dr., Asheville 28803		
Warrick, Pamela J., (Kirby), Rec. Clk., Reg. & Rec.	2572	787-0605
100 Harris, Box 7313; 6808 Chamonix Pl., 27612		
Warrick, Woodley C. Jr., (Malinda), Agri'l. Res. Tech., Ent.	2638	851-8837
840 Method Rd., Unit I, Box 7628; 705 Barbara Dr., 27606		
Warrick, Woodley C., (Mary), Agri'l. Engr. Ext. Spec., Agri'l. Ext.		787-5835
3308 Redbud Ln., 27607		
Washburn, Dr. Steven P., (Connie), Asst. Prof., Ani. Sci.	2771	467-2940
105 Polk, Box 7621; 1502 Highland Trail, Cary 27511		
Washer, Barbara M., (Steven), Lect., Speech-Comm.	2405	467-6227
Thompson Thea., Box 8104; 503 S. Dixon Ave., Cary 27511		
Wasik, Dr. John L., (Barbara H.), Prof. & Undergrad. Admin., Stat.	2532	942-3946
614-F Cox, Box 8203; 609 Brookview Dr., Chapel Hill 27514		
Wasilewski, Andy, (Pamela), Sys. Analyst, Micro., Path. & Parasit., SVM	829-4215	847-0028
4700 Hillsborough St., Box 8401		
Wasson, Dr. Kuldip S., Adj. Asst. Prof., Elec. & Comp. Engr.	2336	469-5006
232 Daniels, Box 7911; 101 Silo Court, Cary 27511		
Waters, Shirley H., (William), Admn. Sec., Zool.	2741	851-5496
2123 Gardner, Box 7617; 804 Merrie Rd., 27606		
Waters, William D., Sr., (Shirley), Litho Press Oper., Univ. Graphics	2131	851-5496
Sullivan Dr., Box 7226; 804 Merrie Rd., 27606		
Waters, Dr. William M., Jr., (Jeanne), Assoc. Prof., Math. & Sci. Educ., Math.	2239	851-4089
326 N Poe, Box 7801; 5032 Kaplan Dr., 27607		
Watkins, Corrinna S., (James), Sec., Human Resou.	7175	266-0691
Admn. Serv. Ctr., Box 7210; 107 Neuse Dr., Knightdale 27545		
Watkins, Linda A., Workshop Coord., IES	2358	
215-A Page, Box 7902; 847 Hadley Rd., 27610		
Watkins, Peggy T., (Mark), Acct. Tech., Contr. & Grants	2153	779-3862
Leazar, Lower Level, Box 7214; 8812 Ashwood Dr., 27603		
Watkins, Melissa C., (Robert), Parking Violations Review Coord., Trans.	3424	
Admn. Serv. Ctr., Box 7221		
Watkins, Rupert W., (Callie), Prof., Bio. & Agri'l. Engr.	2675	934-7793
202 Weaver, Box 7625; 3515 Johnson Rd., Clayton 27520		
Watson, Beverly M., Sec., Ind. Engr.	2362	
328 Riddick, Box 7906; 5855 Blacksmith Dr., 27606		
Watson, Debra A., Food Serv. Asst., Univ. Dining	3963	
Dining Hall, Box 7307		
Watson, Dexter I., Hskp. Asst., Phys. Plant	3323	779-4212
Park Shops, Box 7219		
Watson, George C., (Claudine), Assoc. Prof. Emer., Math.		839-1547
501 E. Whitaker Mill Rd., Apt. 401-B, 27608		
Watson, Dr. Gerald F., Assoc. Prof., Mar., Earth & Atmos. Sci.	7076	755-0856
432 Withers, Box 8208; 1408 Stovall Dr., Apt. A-3, 27606		
Watson, Graham, Grounds Supv.	3408	266-2390
Phys. Plant, Box 7219, Sullivan Dr.; Rt. 2, Box 114A, Knightdale 27610		
Watson, J. Blair, Agri'l. Res. Tech., Hort. Sci.	3167	833-3357
253 Kilgore, Box 7609; 221 Baggett Ave., 27604		

Name, Title, Department and Address	Office Phone	Resid. Phone
Watson, J. Perry, (Frances), Dir., Music 203 Price Music Ctr., Box 7311; 4208 Union St., 27609	2981	787-2532
Watson, James E., (Valeria), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 3555 Government Rd., Clayton 27520	3323	553-7584
Watson, Jessica C., (Mohamed M. Abdel-Hady), Libr. Clk., Circ. Library, Box 7111; 520 Harvard St., 27609	3364	783-6168
Watson, Larry M., Plumber, Phys. Plant Armory Shop, Box 7219; 2036 Ranch Rd., Clayton 27520	3080	553-6648
Watson, Dr. Larry W., Assoc. Prof., Math. & Sci. Educ. 326-H Poe, Box 7801; 605 Smedes Pl., 27605	2239	833-2994
Watson, Mae R., Hskp. Asst., Phys. Plant Park Shops, Box 7219; Rt. 2, Box 114-A, 27610	3323	266-2390
Watson, Margaret, Acct. Clk., IES 215-D Page, Box 7902; 1000 Dorothea Dr., 27603	2358	828-5164
Watson, Runeda L., (Chris), Acct. Clk., Accts. Pay. 213 Admn. Serv. Ctr., Box 7204; 2801-C Seclusion Ct., 27612	2130	781-8396
Watts, Bernadette G., District Prog. Ldr., Home Ec., Agri'l. Ext. Serv. 301 Ricks, Box 7602; 1227 Seaton Rd. 57, Durham 27713	2380	544-5947
Watts, Norbert B., (Judith), Assoc. Dean Emer., Stu Aff. 3312 Duraleigh Rd., 27612		787-4415
Wayne, William W., Strength Coach, Athl. Reynolds Coliseum, Box 8501; 4209-C Bland Rd., 27609	2111	876-0448
Weathers, Betty M., (Robert S.), Lab. Tech., Crop Sci. 4320 Williams, Box 7620; 410 Sunset Dr., Louisburg 27549	3216	496-2342
Weathers, Clyde R., (Barbara), Ext. Prof. Emer., Ec. & Bus. 614 Union St., Cary 27511	3881	467-9268
Weathersby, Charles A., Paint Shop Foreman, Phys. Plant Park Shops, Box 7219; Rt. 1, Box 546, Spring Hill 27882	3323	478-3347
Weatherspoon, Dianne A., Admn. Sec., Math. 360 Harrelson, Box 8205; 2305-C Myron Dr., 27607	3796	782-5463
Weatherspoon, Joyce A., Typ., Chem. 815 Dabney, Box 8204; Rt. 3, Box 240, 27603	2996	772-2246
Weaver, Clementine, Hskp. Asst., Phys. Plant Park Shops, Box 7219; 905 E. Hargett St., 27601	3323	828-7309
Weaver, Equilla, Hskp. Asst., Phys. Plant Park Shops, Box 7219; 905 E. Hargett St., 27601	3323	828-7309
Weaver, Jack N., (Jo), Mgr., Nuc. Measurements & Analysis Ctr., Nuc. Engr. B104 Burlington, Box 7909; 1310 Bloomingdale Dr., Cary 27511	3347	467-3467
Weaver, Sharon A., Sec., Univ. Rel. 12 Holladay, Box 7505; P.O. Box 734, Coats 27521	2850	897-7249
Weaver, Steve L., Grounds Supv., Phys. Plant 4700 Hillsborough St., Box 8401	829-4217	
Weaver, Thurman R., (Shirley), Res. Tech., Ent. Grinnells, Box 7626; 2701 Covered Bridge Rd., Clayton 27520	3140	553-7484
Webb, Benjamin D., (Eleanor), Lect., Graphic Comm./Occup. Educ. 510-F Poe, Box 7801; 5117 Kaplan Dr., 27606	2234	851-4621
Webb, Cherryl D., Food Serv. Asst., Univ. Dining Dining Hall, Box 7307; 101 Apt. D. E. Tipton, 27610	3963	829-0926
Webb, Cynthia S., (David), Libr. Clk., Col. Dev. & Acqs. 3136-E Library, Box 7111; E.S. King Vlg., 27607	3833	834-1802
Weber, Dr. Jerome B., (Mary Jo), Prof., Crop Sci. 4402E Williams, Box 7620; 7701 Ligon Mill Rd., Wake Forest 27587	2511	266-0666
Weddle, Betsy S., (Claude A.), Ctr. Mgr., Ext. 4-H & Youth Dev. Rt. 3, Box 5-A, Reidsville; Rt. 3, Box 5-A, Reidsville 27320	349-9445	342-3515
Weddle, Dr. Owen, (Sue), Univ. Comm. Coord., Univ. Rel. 10 Holladay, Box 7505; 703 N. Bloodworth St., 27604	2850	834-6200
Weed, Nola S., (Sterling), Admn. Off., Grad. Sch. 104 Peele, Box 7102; 5036 Newcastle Rd., 27606	2871	851-4704
Weed, Dr. Sterling B., (Nola), Prof., Soil Sci. 3235 Williams, Box 7619; 5036 Newcastle Rd., 27606	2636	851-4704
Weedon, Frank Sr., Assoc. Athl. Dir., Athl. Case Athl. Ctr., Box 8501; 4300 Driftwood Dr., 27606	2560	851-5277

Name, Title, Department and Address	Office Phone	Resid. Phone
Weeks, Velma C., (Wayne), Admn. Asst., Civil Engr.	2331	467-9500
208 Mann, Box 7908; 916 Tanglewood Dr., Cary 27511		
Weeks, Dr. Willard W., (Roma Jean), Assoc. Prof., Crop Sci.	3216	469-2562
4315-A Williams, Box 7620; 714 King St., Cary 27511		
Wehner, Dr. Todd C., (Linda), Assoc. Prof., Hort. Sci.	3133	848-2269
222 Kilgore, Box 7609; 5720 Edgedale Dr., 27612		
Wehring, Dr. Bernard W., (Margaret), Prof. Nuc. Engr. & Dir., Nuc. Reac. Prog., Nuc. Engr.	2321	782-8519
2117 Burlington, Box 7909; 1522 Dellwood Dr., 27607		
Weidhaas, Nicholas C., (Andrea), Res. Assoc., Wood & Paper Sci.	3181	
1022 Biltmore, Box 8005; P.O. Box 37735, 27627		
Weinberg, Gary R., Lect., Engl.	3863	878-0731
203 Tompkins, Box 8105; 3504 Allendale Dr., 27604		
Weinel, Eleanor F., Asst. Prof., Arch.	2205, 2206	833-2879
321 Brooks, Box 7701; 213 Oberlin Rd., 27605		
Weinstein, Samuel H., Comp. Programmer, Admn. Comp. Serv.	2794	544-6140
B-21 Hillsborough Bldg., Box 7209; 1203 Seaton Rd., T-26, Durham 27713		
Weir, Dr. Bruce S., (Beth), Prof., Stat. & Gen.	2534	781-5926
608-A Cox, Box 8203; 3328 Boulder Ct., 27607		
Weir, Dr. Robert J., (Jane), Dir., Tree Improv. Prog., Assoc. Prof., For.	3168	851-4840
1019 Biltmore, Box 8002; 2201 Stevens Rd., Cary 27511		
Weisberg, Dr. Robert H., Assoc. Prof., Mar., Earth & Atmos. Sci.	7276	467-8860
231 Withers, Box 8208; 1210 Brookgreen Dr., Cary 27511		
Weiser, Conrad W., (Susan Coon), Dir., Crafts Ctr., Univ. Stu. Ctr.	2457	833-9316
Lower Level, Thompson Bldg., Box 7305; 2610 Van Dyke Ave., 27607		
Welby, Dr. Charles W., (Eleanor), Prof., Mar., Earth & Atmos. Sci.	7242	787-7477
302 Withers, Box 8208; 805 Davidson St., 27609		
Welch, Martha M., Asst. Registrar, Reg. & Rec.	2576, 2577, 3048	781-5970
100 Harris, Box 7313; 3510 Fernwood Dr., 27612		
Wellman, Dr. Frederick L., (Dora), Prof. Emer., Plant Path.		839-2013
Box 7616; Apt. 105B Whitaker Glen, 501 E. Whitaker Mill Rd., 27608		
Wells, J. C., (Eloise), Ext. Prof. Emer., Plant Path.	2711	851-1469
1405 Gardner, Box 7616; 6412 King Lawrence Rd., 27607		
Wells, Dr. Robert C., (Ann), Assoc. Dir., Agri'l. Ext. Serv.	2812	851-1732
108 Ricks, Box 7602; 3512 Swift Dr., 27606		
Wells, Sharon H., (Booker T.), Supv., Photocopy Serv., Libr.	2343	365-9068
1222 Library, Box 7111; Rt. 2, Wendell 27591		
Welsch, Dr. Frank, Adj. Prof., Anat., Physiol. Sci., & Radiol., SVM Box 8401; CIIT, Res. Tri. Pk.		
Welsh, Sharon M., Vis. Lect., Speech-Comm.,	2450	782-7398
215 Winston, Box 8104; 3218 Oak Grove Cir., 27607		
Wenig, Dr. Robert E., (Marilyn), Assoc. Prof., Ind. Arts/Occup. Educ.	2234	872-3383
300-N Poe, Box 7801; 5325 Fieldstone St., 27609		
Wentworth, Dr. Thomas R., Assoc. Prof., Bot.	2168	851-5539
4206 Gardner, Box 7612; 2833 Dover Farm Rd., 27606		
Werner, Dr. Dennis J., (Georgina), Assoc. Prof., Hort.	3166	851-7671
268 Kilgore, Box 7609; 400 Merwin Rd., 27606		
Wernsman, Dr. Earl A., (Doris), Prof., Crop Sci.	3216	851-2168
4228-A Williams, Box 7620; 211 Merwin Rd., 27606		
Wertz, Dr. Dennis W., (Cynthia), Assoc. Prof., Chem.	2994	467-7626
726 Dabney, Box 8204; 1037 Ivy Ln., Cary 27511		
Wesen, Dr. Donald P., (Vicki), Prof., Ani. Sci.	2771	851-0336
104 Polk, Box 7621; 1605 Pineview Dr., 27606		
Wesler, Dr. Oscar, Prof., Stat. & Math.	2535	829-0930
604-B Cox, Box 8203; 1926 Smallwood Dr., 27605		
Wessels, Dr. Walter J., (Susan), Assoc. Prof., Ec. & Bus.	2472	467-7136
308-D Hillsborough Bldg., Box 8110; 306 Whitehall Way, Cary, 27511		
West, Diana Sharon, Med. Tech., Food Ani. & Equ. Med., SVM	829-4200	781-2363
4700 Hillsborough St., Box 8401; 114 Wilmont Dr., 27606		
West, Elizabeth A., Medical Illus., Biomed. Comm. Ctr., SVM	829-4206	286-1238
4700 Hillsborough St., Box 8401; 1711 Pace St., Durham 27705		
West, Dr. Harry C., (Ladyce), Assoc. Prof., Engl.	3854	782-2114
G105-B Tompkins, Box 8105; 1511 Canterbury Rd., 27608		

Name, Title, Department and Address	Office Phone	Resid. Phone
West, Dr. James P., (Arnetha), Dist. Ext. Chm. & Assoc. Prof., 4-H & Youth Dev.	2780	834-9872
307 Ricks, Box 7604; 2401 Sanderford Rd., 27610		
West, John R., (Betty J.), Ext. Asst. Prof., Emer., Poul. Sci.	2621	
Scott, Box 7608; Rt. 2, Box 645, Newland 28657		704-733-0071
West, Paul D., Jr., (Betsy), Assoc. Dir., Fin. Aid.	2421, 2448	782-9750
213 Peele, Box 7302; 1308 Glen Eden Dr., 27612		
West, Sue H., (C.T.), Admn. Asst., Chan. Off.	2191	834-5420
A Holladay, Box 7001; 1611 Craig St., 27608		
West, Susan A., Agri'l. Res. Tech., Ani. Sci.	2763	859-2270
208 Polk, Box 7621; 4210 Reavis Rd., 27606		
West, Terry N., Electronics Tech., SVM	829-4200	481-1441
4700 Hillsborough St., Box 8401; 104 Rubin Ct., Apt. B3, Cary 27511		
Westbrook Dr. Bert W., (Es'Dorn), Prof., Psy.	2252	787-5617
703 Poe Box 7801; 3431 Churchill Rd.		
Westerman, Dr. Philip W., (Janet), Prof., Bio. & Agri'l. Engr.	3121	851-1332
265 Weaver, Box 7625; 4712 Kaplan Dr., 27606		
Westerveld, Dr. Willem B., (Esther), Res. Asst. Prof., Physics	7018	782-3683
117 Bureau of Mines, Box 8202; 3511 Horton St., Apt. 203, 27607		
Weston, Fran S., Ben. Mgr., Payr. & Ben.	2151	
Admn. Serv. Ctr., Box 7215		
Weston, Molly J., (Noel), Wordprocessor, Comp. Sci.	2882	362-1436
122 Daniels, Box 8206; 414 E. Williams St., Apex 27502		
Weston, Dr. William D., Dir., Coop. Educ., Prov. Off.	2199	552-6441
M-6 Link Bldg., Box 7110; Rt. 1, Box 115A, Holly Springs 27540		
Weybrew, Dr. Joseph A., (Lueva), WNR Prof. Emer., Crop Sci.		851-4803
4310 Williams; 112 Pineland Cir., 27606		
Whaley, Kathryn R., Acct. Clk., SVM	829-4200	
4700 Hillsborough St., Box 8401; 209 Wake Forest Rd., 27604		
Whaley, Dr. Wilson M., (Joan), Prof. Emer., Text. Chem.	203-762-7907	
127 Indian Hill Rd., Wilton, CN 06897		
Whangbo, Dr. Myung H. (Jin O.), Assoc. Prof., Chem.	3616	851-6053
523 Dabney, Box 8204; 709 Brent St., 27606		
Wheatley, Dr. Jack H., (Bonnie), Assoc. Prof., Math. & Sci. Educ.	2238	834-3245
326 Poe, Box 7801; 325 Polk St., 27604		
Wheeler, Dr. Elisabeth A., (Andy), Prof., Wood Paper Sci.	3181	848-7751
1022 Biltmore, Box 8005; 6816 Perkins Dr., 27612		
Wheeler, Karen M., (Jim), Med. Rec. Asst., Vet. Teach. Hosp., SVM	829-4200	833-9146
4700 Hillsborough St., Box 8401; 5605 Neuse St., 27610		
Wheeler, Dr. Mary E., (Leon), Prof. Emer., Hist.		726-6276
3212 Evans St., Morehead City 28557		
Wheeler, Pamela T., Sec., Credit Union	2686	556-6649
2802 Hillsborough St., Box 8609; Rt. 1, Box 365, Youngsville 27596		
Wheless, Amanda H., Sec., Occup. Educ.	2234	834-3497
510 Poe, Box 7801; 2810 Kilgore Ave. 27607		
Wheless, J. David, (Lorie), Engr. Res. Tech., Bio. & Agri'l. Engr.	3121	496-3697
134-A Weaver, Box 7625; Rt. 1, Box 284, Louisburg 27549		
Wheless, James C., (Shirley), Hskp. Asst., Phys. Plant	3323	478-4194
Park Shops, Box 7219; Rt. 3, Box 75, Spring Hope 27882		
Whitaker, Dr. Michael D., (Beth), Assoc. Prof., Food Ani. & Equ. Med., SVM	829-4246	779-6644
4700 Hillsborough St., Box 8401; 7031 E. Ridge Dr., Apex 27502		
Whitaker, Alice K., Acct. Tech., Fund. Acct.	2149	850-9621
213 Admn. Serv. Ctr., Box 7203; 4529 Hargrove Rd., 27604		
Whitaker, Shirley P., (Charles), Sec., Mech. & Aero. Engr.	2365	
3211 Broughton, Box 7910; 611 Peyton St., Apt. 7, 27610		
Whitaker, Dr. Thomas B., (Jill), Prof., USDA, Bio. & Agri'l. Engr.	3101	787-5050
124 Weaver, Box 7625; 2000 Ridge Rd., 27607		
Whitcomb, Terri F., Sys. Programmer, Comp. Graphics Ctr.	3430	467-9279
342 Daniels, Box 7106; 102 B-1 Lasky Ct., Cary 27511		
White, Arthur L., (Joan), Asst. to Vice Chan., Stu. Affairs for Univ. Dining, Univ. Dining	3090	787-2612
4109 Univ. Stu. Ctr., Box 7307; 2202 Anderson Dr., 27608		

Name, Title, Department and Address	Office Phone	Resid. Phone
White, Brenda J., Microcomp. Trainer, Urban Aff.	2578	781-5419
266 McKimmon, Box 7401; 6009-B Shadetree Lane, 27612		
White, Dick, (Diane), Sys. Acct., Fin. Off. Sys. Staff	3640	781-7942
1212 Blue Ridge Rd., Box 7227; 221 Windel Dr., 27609		
White, Edna B., Libr. Tech. Asst., Vet. Med. Libr.	829-4218	851-9364
4700 Hillsborough St., Box 8401; 605 Dylan Ct., 27606		
White, Edna Blanchard, (Ernie), Sec., Engr. Spec. Prog.	2341	876-3550
115 Page, Box 7904; 6312 Newmarket Way, 27609		
White, Dr. Estelle E., Assoc. Prof. Emer., Adult & Comm. Coll. Educ.	2707	223-4758
Box 7607; Box 67, Newport 28570		
White, Jan T., (S. B.), Sec., Agri'l. Ext.	2690	851-0272
301 Ricks, Box 7604; 1700 Holt Pl., 27607		
White, Linda H., (Ralph), Sec., Res. Admn.	7876	851-0863
1 Holladay, Box 7003; 1800 Medfield Rd., 27607		
White, Lydia C., (Doyle), Res. Tech., Plant Path.	3488	779-0149
2420 Gardner, Box 7616; 716 Woodland Rd., 27603		
White, Margaret M., Sec., UNC Ctr. for Pub. TV	2853	851-6642
TV Ctr., Box 8601; 11132-A Crab Orchard Dr., 27606		
White, Marianne K., (Graham), Pharm., Health Serv.	2563	552-3959
Clark Inf., Box 7304; Rt. 1, Box 54, Fuquay-Varina 27526		
White, Philip M., Agri'l. Res. Tech., Crop Sci.	2657	829-1213
1119 Williams, Box 7620; 601 Rosemont Ave., 27607		
White, Dr. Raymond C., (Cleta B.), Prof. Emer., Chem.		787-6851
1509 Lutz Ave., 27607		
White, Dr. Robert E., Math	7478	
308 Harrelson, Box 8205; 1219 Kent Rd., 27606		
White, Dr. Robert K., (Ruth), Dir., Adult Credit Prog. Dev., Lifelong Educ.	3373, 3010	467-8355
219 McKimmon, Box 7401; 910 Pamlico Dr., Cary 27511		
Whitehurst, Carolyn P., (Rick), Cust. Serv. Clk., SSS	2161	467-4948
SSS, Box 7224; 414 Waldo St., Cary 27511		
Whiteside, Dr. Catherine, Res. Assoc., Food Sci.	2974	851-7156
320 Schaub, Box 7624; 1135-C Crab Orchard Dr., 27606		
Whiteside-Dixon, Dr. Jennifer C., Resid., Path., SVM	829-4200	
4700 Hillsborough St., Box 8401		
Whitfield, Fred E., (Tommie), Prof. For. Emer., Agri'l. Ext. Serv.		787-4871
1324 Ridge Rd., 27607		
Whitfield, Dr. John K., (Doris), Prof. Emer., Mech. & Aero. Engr.	2365	847-4408
4154 Broughton, Box 7910; 11420 Coachman's Way, 27614		
Whitford, Dr. Larry A., Prof. Emer., Bot.	2727	787-4776
3211 Gardner, Box 7504; 3217 Oak Grove Cir., 27607		
Whitley, D. Scott, Agri'l. Res. Tech., Crop Sci. Ext. 516 Test Farm Rd., Waynesville 28786	704-452-5608	
P.O. Box 731, Lake Junaluska 28745	704-627-3026	
Whitley, Tommy R., (Janet), Asst. Mgr., Oper., Comp. Ctr.	2517	269-4129
105 Hillsborough Bldg., Box 7109; 110 W. Sycamore St., Zebulon 27597		
Whitlow, Dr. Lon W., (Karen), Assoc. Prof., Ani. Sci.	2771	851-5824
105 Polk, Box 7621; Rt. 4, Box 749, 27606		
Whitman, Jeanne M., Res. Tech., Reprod. Phys. Lab., Ani. Sci.	2673	942-4205
1400 Blue Ridge Rd., Box 7621; 111 Hidden Valley Dr., Chapel Hill 27514		
Whitmore, Mary J., (Harry), EFNEP Coord., Home Ec., AES	2782	493-2812
101 Ricks, Box 7605; 4107 Edenton Lane, Durham 27707		
Whitt, Debra A., Budg. Clk., SVM	829-4200	266-5844
4700 Hillsborough St., Box 8401; 6901 Buffaloe Rd., Lot 182, 27604		
Whitworth, Dr. Ulysses G., (Elaine), Asst. Prof., Ani. Sci.	2763	477-1437
Polk, Box 7601; 6 Hedgerow Pl., Durham 27704		
Wickham, Patricia V., Sec., Plant Path.	2828	467-9955
3709 Hillsborough St., Box 8604; 521 Reedy Creek Rd., Cary 27511		
Wiggins, Ina B., (Floyd), Sec., Athl.	2880	772-3292
2A Case Athl. Ctr., Box 8501; 1701 Pinedale Dr., 27603		
Wiggins, James B., Jr., Agri'l. Res. Asst., Univ. Res. Unit 1	2713	833-2621
4616 Reedy Creek Rd., Box 7601; 1213 Ridge Rd., 27607		
Wiggs, Linda W., Patrol Off., Public Safety	3206	
Field House, Box 7220		

Name, Title, Department and Address	Office Phone	Resid. Phone
Wilchins, Susan D., (Marc), Asst. Prof., Design 201A Leazar, Box 7701; 4517 Keswick Dr., 27609	3260	782-5956
Wilder, Freeman C., (Katherine), Lab. Mech., Bio. & Agri'l. Engr. 130 Weaver, Box 7625; Rt. 4, Box 766, 27606	3101	851-4358
Wilder, George R., (Maxine), Lab. Mgr., Plant Path. 2521-A Gardner, Box 7616; 121 S. Buffaloe St., P.O. Box 52, Wendell 27591	2735	365-7228
Wilder, Gil-Ann, Sec., Physics 400 Cox, Box 8202; 1003G Village Greenway, Cary 27511	2515	467-7671
Wilder, Sarah P., (Bernard), Sec., Public Safety Field House, Box 7220; 2129 Lyndhurst Dr., 27610	2568	832-7998
Wilds, Albert A., Jr., (Mary), Min. Chemist, Min. Res. Lab. 180 Coxe Ave., Asheville 28801		704-251-6155
Rt. 1, Box 488 Candler 28715		704-667-0327
Wilk, Dr. John C., Prof., Ani. Sci. 232-D Polk, Box 7621; 6512 Arnold Rd., 27607	2766	851-0264
Wilkerson, Charles E., Elect., Phys. Plant Armory Shop, Box 7219; Willow Springs 27592	3080	552-4675
Wilkerson, Dr. Gail G., Asst. Prof., Crop. Sci. 2404B Williams, Box 7620; 2400 Perennial St., 27603	2246	839-1439
Wilkerson, Robert C., (Ruby), Sys. Analyst, Admn. Comp. Serv. B-21 Hillsborough Bldg., Box 7227; 7601 Trowbridge Ct., 27612	3640	848-6648
Wilkerson, Roland, Jr., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 3024-B Richward Pl., 27607	3323	755-1341
Wilkerson, Ruby W., (Robert), Sec., Occup. Educ. 502 Poe, Box 7801; 7601 Trowbridge Ct., 27612	2234	848-6648
Wilkins, Amy Y., (Darnell), Woodprocessor, Admn. Comp. Serv. B21 Hillsborough Bldg., Box 7209; Rt. 1, Box 226, Knightdale 27545	2794	266-1982
Wilkins, Pearl B., (Thomas), Clk.-Typ., Ani. Sci. 211-B Polk, Box 7621; 317 Clarendon Crescent, 27610	2764	829-9632
Wilkins, Peggy C., (Richard L.), Admn. Off., Dean's Off., Engr. 101 Page, Box 7901; 112 Bluegrass Dr., Garner 27529	2310	772-1793
Wilkins, Ray, Hskp. Supv., Phys. Plant Park Shops, Box 7219; 2513 Foxgate Dr., 27610	3323	834-9093
Wilkins, William I., Stock Coord. Mdse. Div., SSS SSS, Box 7224; Lot 136, Buffalo Rd., Garner 27529	2161	772-4819
Wilkinson, Jean P., (Sam), Sec., Hort. Sci. 258 Kilgore, Box 7609; 2617 Wells Ave, 27608	3166	787-6215
Wilkinson, Judy H., (Gary), Acct. Tech., Admn. Serv., Engr. 101 Page, Box 7901; 224 Oakcrest Dr., Wake Forest 27587	3329	528-3349
Wilkinson, Richard R., Prof., Land. Arch. 302 Brooks Add., Box 7701; 1621 Park Dr., 27605	3051, 3052	833-3250
Williams, Anna M., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 613 S. Boundary, 27601	3323	828-9258
Williams, Armantean D., (Dorman), Off. Supv., Book Div., SSS SSS, Box 7224; 317 Grand Ave., 27606	3117	851-9194
Williams, Betty B., Sec., Agri'l. Comm. 118 Ricks, Box 7603; Rt. 2, Box 473, Knightdale 27545	2800	266-3014
Williams, C. Richard, Purch. Off., Purch. & Stores 206 Alumni, Box 7212	2171	
Williams, Carlis D., Patrol Off., Public Safety Field House, Box 7220	3206	
Williams, Carol M., (Al), Admn. Sec., Bus. Div. 203 Holladay, Box 7228; 165 Winchester Dr., Wendell 27591	2146	365-5341
Williams, Charles E., (Dorothy), Painter, Phys. Plant Park Shops, Box 7219; 805 Peyton St., 27610	3323	833-6161
Williams, Charles M., (Eileen), Vis. Instr., Poul. Sci. 2717 Bostian, Box 7611; 1210 Balmoral Dr., Cary 27511	3341	467-4407
Williams, Charles R., Analyst Programmer, Admn. Comp. Serv. 1212 Blueridge Rd., Box 7227; 1410 Buckhorn Rd., Garner 27529	3640	779-1791
Williams, Diane W., (P. T.), Pers. Asst., Human Resou. Admn. Serv. Ctr., Box 7210; 411 Avery St., Garner 27529	7929	
Williams, Delores A., (Talmage), Sec., Univ. Contact Off. for Int'l. Vis. 110 Patterson, Box 7601; 400 Briarcliff Ln., Cary 27511	2818	467-5126

Name, Title, Department and Address	Office Phone	Resid. Phone
Williams, Dottie C., Sec., Text.	3469	467-1788
B-22A Nelson, Box 8301; 1602 Tarbert Dr., Cary 27511		
Williams, Douglas A., Engr. Res. Tech., Bio. & Agri'l. Engr.	3121	456-4124
270 Weaver, Box 7625; P.O. Box 37283, 27627		
Williams, Earl, Grounds Wkr., Phys. Plant	3408	834-1526
Sullivan Dr., Box 7219; Rt. 4, Box 387, Fuquay-Varina 27526		
Williams, Edward R., (Ruth), TV Prod. Asst., Media Serv., Hum. & Soc. Sci.	3334	469-0537
G-116 Tompkins, Box 8101; 507-B Reedy Creek Rd., Cary 27511		
Williams, Fred M., (JoAnne), Med. Supply Tech., Vet. Teach. Hosp., SVM	829-4200	828-0242
4700 Hillsborough St., Box 8401; 2004 Edwin Dr., 27610		
Williams, Freddie M., Hskp. Asst., Phys. Plant	3323	833-1855
Park Shops, Box 7219; 317 Dacian Rd., 27610		
Williams, General L., Laborer, Phys. Plant	3408	
Sullivan Dr., Box 7219; 122 E. Lenoir St., 27601		
Williams, Gertrude H., (Joe), Sec., Agri'l. Ext. Serv.	3252	828-7009
214 Ricks, Box 7602; 2445 Kennington Rd., 27610		
Williams, Glenn R., Mech., Phys. Plant	3479	
8 Riddick Stad., Box 7219		
Williams, Dr. J. Oliver, (Julia), Prof., Pol. Sci. & Pub. Admin.	2060	787-5961
Link Bldg., Box 8102; 1905 Lewis Cir., 27608		
Williams, James C., (Pearl), Boiler Oper. Shift Supv., Phys. Plant	2184	553-4989
Heating Plant, Box 7219; 206 S. Moore St., Clayton 27520		
Williams, Jean B., Sec., Int'l. Prog.	3201	787-6848
209 Daniels, Box 7112; 3407 Bradley Pl., 27607		
Williams, Jesse L., Stock Clk., Central Stores	3795	
Sullivan Dr., Box 7225; 815½ New Bern Ave., 27601		
Williams, Justina H., Res. Tech., Gen.	2294	
3616 Gardner, Box 7614; 1800 B Generation Dr., 27612		
Williams, Kathy M., Cash., Univ. Dining	3270	781-8394
Erdahl-Cloyd Annex, Box 7307; 1229 Canterbury Rd., 27608		
Williams, Ken H., Mech., Univ. Res. Unit 2	2759	851-1448
3720 Lake Wheeler Rd., Box 7601; 6015 Holly Springs Rd., 27606		
Williams, Leotha, Printing Equip. Oper., Univ. Graphics	2131	772-4944
Sullivan Dr., Box 7226; 1507 Mechanical Blvd., Garner 27529		
Williams, Levern, Lect., Math.	2381	489-8318
205 Harrelson, Box 8205; 2926 Driftwood Dr., Durham 27707		
Williams, Lillian E., Pers. Asst., Phys. Plant	2180	
204 Morris, Box 7219		
Williams, Linda R., Asst. Prof., Soc. Wk. Prog., Soc. & Anth.	3291	833-5454
328 1911 Bldg., Box 8107; 961 St. Mary's St., 27605		
Williams, Lucille, Hskp. Asst., Phys. Plant	3323	
Park Shops, Box 7219		
Williams, Marvin, (Rachel), Boiler Oper., Phys. Plant	829-4216	469-6288
4700 Hillsborough St., Box 8401; Rt. 3, Box 428, Louisburg 27549		
Williams, Dr. Mary C., Prof., Engl.	3353	833-3805
131-E Tompkins, Box 8105; 622 Woodburn Rd., 27605		
Williams, Mary E., Food Serv. Asst., Univ. Dining	3963	782-0172
Dining Hall, Box 7307; 3432 Edwards Mill Rd., 27612		
Williams, Mary M., Sec., Engl.	3854	859-2421
109 Tompkins, Box 8105; 1623 Roanoke Ct., 27606		
Williams, Michele T., Data Entry Supv., Univ. Dining	2857	781-0036
Dining Hall, Box 7307; 1641 Village Glenn, 27612		
Williams, Nancy J., Agri'l. Res. Asst., Ani. Sci.	2637	
3720 Lake Wheeler Rd., Unit 2, Box 7621; 4115 Kaplan Dr., 27606		
Williams, Dr. Paul F., (Katherine), Assoc. Prof., Ec. & Bus.	3273	
201 Patterson, Box 8109		
Williams, Pearlina F., Laun. Wkr., Laun.	2122	821-0872
Laundry, Box 7218; 2308 Danridge Dr.		
Williams, Penny S., Sec., Counseling Ctr.,	2423	834-6329
200 Harris, Box 7312; 508 Phelps St. Apt. #3, 27607		
Williams, Porter, Jr., Prof. Emer., Engl.		
36 Chalmers St., Charleston, SC 29401		

Name, Title, Department and Address	Office Phone	Resid. Phone
Williams, Dr. Robert T., (Catherine), Assoc. Dean & Asst. Prof., Dean's Off., Educ.	2231	467-9669
208 Poe, Box 7801; 1307 Kingston Ridge Dr., Cary 27511		
Williams, Sharon T., Clk.-Typ., Anat., Physiol. Sci. & Radiol. SVM	829-4200	
4700 Hillsborough St., Box 8401		
Williams, Shirley L., Acct. Clk., Univ. Ext.	2177	934-5853
204 McKimmon, Box 7401; 105 E. Johnston St., Smithfield 27577		
Williams, Steve A., (Leslie), Supv., Med. Supply, Vet. Teach. Hosp., SVM	829-4200	851-3854
4700 Hillsborough St., Box 8401; 5552B Kaplen Dr., 27606		
Williams, Thomas R., (Wanda), Mech., Phys. Plant	3749	
Riddick Stad., Box 7219; Rt. 4, Benson 27504		
Williams, W. Marvin, (Nancy), Photog., Plant Path.	2711	266-1105
1313 Gardner, Box 7616; Rt. 3, Box 202, Whitfield St., Knightdale 27545		
Williams, Walter G., Maint. Mech., Phys. Plant	3323	
Park Shops, Box 7219		
Williams, Willie R., Hskp. Supv., Phys. Plant	3323	
Park Shops, Box 7219		
Williams, Yvonne, Clk.-Typ., Alumni Rel.	3375	878-0406
Alumni, Box 7503; 800-104 Navaho Dr., 27609		
Williamson, Inez, Hskp. Asst., Phys. Plant	3323	834-0870
Park Shops, Box 7219; 1317 E. Martin St., 27610		
Williamson, Lynell, (Yvonne), Lab. Mgr., Text. Chem.	2551	829-0839
123 Clark, Box 8302; 2403 Kilgore Ave., 27607		
Williamson, Dr. Norman F., (Elizabeth), Asst. Prof., Comp. Sci.	7172	834-3987
131-N Daniels, Box 8206; 706 Faircloth St., 27607		
Williamson, Winslow D., (Inez), Lab. Ani. Tech., Poul. Sci.	2692	834-0870
Dearstyne Avian Res. Ctr., Box 7608; 1317 E. Martin St., 27610		
Willis, Judith D., (Carlton), Off. Mgr., Purch. & Stores	2198	772-4040
Central Stores, Box 7225; 200 Lane of Sir Lancelot, Rt. 2, Garner 27529		
Willis, Loretta V., (Roger), Res. Tech., Plant Path.	2735	832-7128
2604 Gardner, Box 7616; 2223 The Circle, 27608		
Willis, Dr. William E., Coord. Comp. Oper., Engr.	2345	821-3974
218 Page, Box 7901; 3808-A Marcom St., 27606		
Willits, Dr. Daniel H., (Stephanie), Assoc. Prof., Bio. & Agri'l. Engr.	3121	781-2143
180 Weaver, Box 7625; 2804 Old Orchard Rd., 27607		
Wilson, Angela J., (Mark), Clk.-Typ., Comp. Ani. & Sp. Species Med., SVM	829-4200	
4700 Hillsborough St., Box 8401		
Wilson, Dr. Beth E., Asst. Prof., Rec. Resou. Admin.	3276	851-5456
4004-B Biltmore, Box 8004; 5525B Kaplan Dr., 27606		
Wilson, Betty W., Acct. Clk., Phys. Plant	2180	847-3066
200-B Morris, Box 7219; 6957 Staghorn Ln., 27609		
Wilson, Doris D., Food Serv. Asst., Univ. Dining	3090	832-6156
Univ. Stu. Ctr., Box 7307; 2810 Conifer Dr., Apt. A, 27606		
Wilson, Elizabeth B., (Larry), Sec., Educ'l. Ldrship. & Prog. Eval.	3127	772-7482
608 Poe, Box 7801; 102 Thistle Ct., Garner 27529		
Wilson, Elizabeth H., (Graham), Res. Tech., Wood & Paper Sci.	2888	851-3132
3116 Biltmore, Box 8005; 1004 Bayfield Dr., 27606		
Wilson, Gary C., Libr. Asst., Ref. Lib.	2935	834-2903
1140 Library, Box 7111; 3508 Neil St., 27607		
Wilson, Dr. Jack W., Assoc. Prof., Ec. & Bus.	2605	787-4752
12 Patterson, Box 8109; 2129 Buckingham Rd., 27607		
Wilson, Dr. James B., (Nell), Prof. & Assoc. Head, Math.	2382	467-2638
252 Harrelson, Box 8205; 1311 Greenwood Cir., Cary 27511		
Wilson, Janet G., (Lynn), Admn. Sec., Gen.	2292	872-7058
3513 Gardner, Box 7614; 5709 Finsbury Ct., 27609		
Wilson, John H., (Rose), Assoc. Prof., Plant Path. & Hort. Sci.	3113	467-0518
51 Kilgore, Box 7609; 527 E. Cornwall Rd., Cary 27511		
Wilson, Dr. Karen G., (Dick), Adj. Asst. Prof., Ent.	733-6930	362-4404
NCDA 1 W. Edenton St., 27647; Rt. 2, Box 84-A, Apex 27502		
Wilson, Dr. L. George, (Claudia), Prof., Hort. Sci.	3283, 3284	781-3942
228 Kilgore, Box 7609; 508 Ramblewood Dr., 27609		

Name, Title, Department and Address	Office Phone	Resid. Phone
Wilson, Marcia N., Libr. Clk., Acqs., Libr. 3136-H Library, Box 7111; 519-4 N. Bloodworth St., 27604	3833	839-8321
Wilson, Mark, Gen. Utility Wkr., Phys. Plant Park Shops, Box 7219; 914 Wade Ave., Garner 27529	3323	772-0651
Wilson, Dr. Richard F., (Pamela), Res. Plant Physiol., Crop Sci. 4114-B Williams, Box 7620; 1617 Ridgeland Dr., 27607	3267	851-0511
Wilson, Rose B., (John), Acct. Tech., N.C. Crop Impr. Assoc. 3709 Hillsborough St., Box 8604; 527 E. Cornwall Rd., Cary 27511	2851	467-0518
Wilson, Shirley T., (Steve), Sec., Phys. Plant Morris, Box 7219; Rt. 4, Box 232, Fuquay-Varina 27526	2184	552-3566
Wilson, Steve, TV Engr., Univ. Stud. 2324 Library, Box 7111; 1301 Falls Church Rd., 27609	7111	
Wilson, Sue F., (Eddie), Sec., Agri'l. Ext., Ext. 4-H & Youth Dev. 848-4263 207 Ricks, Box 7606; 600 Brittane Bay East, 27614	3242	848-4263
Wilson, Travis H., (Steve), Admn. Sec., Fin. B Holladay, Box 7201; 104 Fern Forest Dr., 27603	2143	772-9344
Wilson, Willie, III, Laun. Carrier, Laun. Laundry, Box 7218; 720 Carlisle St., 27610	2122	832-7381
Wilson, Willie, Jr., Grounds Wkr., Phys. Plant Sullivan Dr., Box 7219; 1212 Bentley Dr., 27610	3408	834-0691
Wimberley, Dr. Ronald C., (Sandra), Prof., Soc. & Anth. 342 1911 Bldg., Box 8107; 3412 Bradley Pl., 27607	2702, 3180	781-1575
Wimbish, Clarice P., Bind. Wkr., Univ. Graphics Sullivan Dr., Box 7226; 1909 Wimbish Ln., 27612	2131	848-4096
Wimbish, Mark D., Whse. Mgr., Phys. Plant 20 Riddick Stad., Box 7219; 1853 Eastern Blvd., 27610	3256	828-9899
Winans, Deborah J., (Chris), Recept., SSS SSS, Box 7224; 364-F So. Franklin St., Wake Forest 27587	2161	556-1613
Windham, Debra K., Ec. & Bus. 218 Hillsborough Bldg., Box 8110; Rt. 2, Box 390-H, Smithfield 27577	3886	934-6656
Windham, Martha J., Sec., Public Safety Field House, Box 7220	2156	
Windsor, Penelope V., Res. Tech., Soil Sci. 3114 Williams, Box 7619; Rt. 1, Box 43, Apex 27502	2389	779-4662
Wineland, Dr. Michael J., (Nancy), Asst. Prof., Poul. Sci. Ext. 211 Scott, Box 7608; 6615 Johnsedale Rd., 27609	2621	872-9726
Winkler, Edwin W., (Ida Lee), Assoc. Prof., Elec. Engr. 509 Gardner St., 27607		832-1370
Winkler, Thomas M., (Sarah), Elec. Tech. Phyt., SALS/Phyt. 2003 Gardner, Box 7618; 5216 Melbourne Rd., 27606	2778	851-8757
Winn, Sarah E., Res. Tech., Food Sci. 338 Schaub, Box 7624; 1704 Center Rd., 27608	2974	834-6669
Winslow, Tim C., (Mary), Lect., Phys. Educ. 2027 Carmichael, Box 8111; 201 Dundalk Way, Cary 27511	2487	362-1254
Winstead, Dr. Nash N., (Gerry), Prov. & Vice Chan., Off. of Prov. & Vice Chan. 109 Holladay, Box 7101; 1109 Glendale Dr., 27612	2195	787-1993
Winston, Barbara J., Bind. Wkr., Univ. Graphics Sullivan Dr., Box 7226; 232 Camden St., 27601	2131	832-8981
Winston, Dr. Bruce, Spec., Con. Educ. & Professional Dev. 147F McKimmon, Box 7410; 2501 Holiday Dr., 27610	2261	772-1455
Winston, Dr. Hubert, Dir., Acad Aff., Engr. 115 Page, Box 7901; 3967 Wendy Ln., 27606	2315	859-0017
Winton, Dr. Lowell S., (Cornelia), Prof. Emer., Math. Box 8205; 3007 Mayview Rd., 27607		833-4763
Wise, Dr. George H., (Marie), Prof. Emer., Ani. Sci. 304-A Polk, Box 7621; 229 Woodburn Rd., 27605	2773	833-9262
Wiser, Dr. Edward H., (Betty), Prof., Bio. & Agri'l. Engr. 148 Weaver, Box 7625; 404 Dixie Tr., 27607	3121	834-2114
Wishy, Dr. Bernard W., Prof., Hist. 111 Harrelson, Box 8108; 2636 Tatton Dr., 27608	2484	828-5497
Wisniewski, Michael E., (Gail), Res. Asst. NCSFNC, For. 1025 Biltmore, Box 8002; 103 Kenmure Ct., Cary 27511	3500, 3735	362-5097

Name, Title, Department and Address	Office Phone	Resid. Phone
Witham, Paul H., (Connie), Univ. Dev. Off., Development 1-A Holladay, Box 7502; 103 Joel Ct., Cary 27511	3700	467-1113
Witherspoon, Dr. Augustus M., (Cookie), Assoc. Grad Dean, Prof., Bot., Grad. Sch., Bot.	7461, 3345	787-9663
108 Peele, 3211-B Gardner, Box 7102, 7612; 2701 Rothgeb Dr., 27609		
Witt, Dr. Mary Ann, (Ron), Assoc. Prof., For. Lang. 114 1911 Bldg., Box 8106; 173 W. Margaret Lane, Hillsborough 27278	2475	732-7406
Wittkamp, Joel, (Sherry), Assoc. Prof., Design 310-E Brooks, Box 7701; 4505 Eliot Pl., 27609	2203	876-6057
Wohlgenant, Dr. Michael K., (Margaret), Assoc. Prof., Ec. & Bus. Box 8109		783-8949
Wolcott, Dr. Donna L., (Thomas G.), Vis. Assoc. Prof., Mar., Earth & Atmos. Sci.	7866	821-4203
138 Withers, Box 8208; 18 Henderson St., 27607		
Wolcott, Dr. Thomas G., (Donna Lee), Prof., Mar., Earth & Atmos. Sci.	7866	821-4203
138B Withers, Box 8208; 18 Henderson St., 27607		
Wolf, Isobel T., Tech. Typ., Mech. & Aero. Engr. 3211 Broughton, Box 7910; Rt. 3, Dunn 28334	2365	897-5588
Wolfe, Karin L., Social Res. Asst., Inst'l. Res. 202 Peele, Box 7002; 1036 Randolph Ct., Cary 27511	2776	469-1338
Wollum, Dr. Arthur G., (Karen), Prof., Soil Sci. 3411 Williams, Box 7619; 4925 Liles Rd., 27606	2600	
Woltz, Dr. Willie G., (Betsy), Prof. Emer., Soil Sci. 105 Country Club Dr., P.O. Box 912, Oxford 27565		693-7831
Womack, Judy R., Acct. Clk., Agri. & Life Sci. 120 Patterson, Box 7601; P.O. Box 72, Fuquay-Varina 27526	2714	552-9185
Womble, Charlotte M., Ext. Prof. Emer., Spec. In Charge, Housing Emer., Home Ec., Agri'l. Ext. 308 Horne St.		828-5216
Won, Dr. I. J., (Susan), Prof., Mar., Earth & Atmos. Sci. 110E Withers, Box 8208; 319 Morrison Ave., 27608	7015	833-7586
Wood, B. Keith, Agri'l. Res. Tech., Plant Path. 3709 Hillsborough St., Box 8604; 204 Cottonwood Dr., Clayton 27520	2828	934-2305
Wood, C. Renee, Sgt., Public Safety Field House, Box 7220	2156	
Wood, Dr. Denis, (Ingrid), Assoc. Prof., Lands. Arch. 301 Brooks, Box 7701; 435 Cutler St., 27603	2204	832-1120
Wood, James S., Agri'l. Res. Tech., Crop Sci. Ext. 4210 Williams, Box 7620; 107 Fox Park, Louisburg 27549	3633, 3331	496-5944
Wood, Lester O., (Lou), Dairy Plant Supv., Food Sci. 12 Schaub, Box 7624; 2900 Government Rd., Clayton 27520	2760	553-5257
Wood, Louise G., (L. Odell), Acct. Clk., Bio. & Agri'l. Engr. 103 Weaver, Box 7625; 2900 Government Rd., Clayton 27520	2695	553-5257
Wood, Shelia M., (Gregory), Acct. Clk., Accts. Pay 213 Admn. Serv. Ctr., Box 7204	2158	
Wood, Tim, Agri'l. Res. Tech., Ani. Sci. 3720 Lake Wheeler Rd., Unit 2, Box 7621; 2000 Spring Dr., Garner 27529	2759	772-8118
Woodall, Ann C., (James H.), Comp. Oper., Stu. Aff. 201 Harris, Box 7315; 3418 Avent Ferry Rd., 27606	2449	851-5353
Woodall, Lilbron G., (Elizabeth), Agri'l. Res. Tech., Crop Sci. 1203 Williams, Box 7620; 5416 Old South Rd., 27606	2657	851-4669
Woodall, Louis, (Rachel), Main. Supv., Spec. Proj. E.S. King Vlg. Bldg. P. King Vlg., Box 7315; 2215 Cary-Macedonia Rd.	2430	851-2813
Woodall, Marilyn T., (Bryant), Sec. Ent. Research Annex West-A, Box 7630; 2209 Cary-Macedonia Rd., 27606	3579	851-8621
Woodard, Effie M., (Rudolph), Hskp. Supv., Phys. Plant Park Shops, Box 7219; 207 Gatewood Dr., Garner 27529	3323	833-4550
Woodard, Joseph R., (Ellen), Prof. Emer., Ani. Sci. 60 Pinehurst Trace Dr., Pinehurst 28347		787-3669
Woodbury, Arthur J., (Irene), Assoc. Prof. Emer., Text. 30 Knollridge Rd., Apt. 114, Salem, VA 24153		703-380-4991

Name, Title, Department and Address	Office Phone	Resid. Phone
Woodell, Connie G., (Jimmie), Sec., Mech. & Aero. Engr.	2365	
3221 Broughton, Box 7910; 209 W. Chatham St., Apex 27502		
Wooden, Eddie W., Food Serv. Asst., Univ. Dining	3963	
Dining Hall, Box 7307; 901 Navaho Dr., Apt. 203, 27609		
Woodhouse, Dr. William W., Jr., (Margaret), Prof. Emer., Soil Sci.	3288	834-5113
1218 Williams; 2801 O'Berry St., 27607		
Woodlief, David E., Laborer, Phys. Plant	3408	556-5015
Sullivan Dr., Box 7219; Rt. 1, Box 158AA, Wake Forest 27587		
Woodlief, Labin T., Jr., (Barbara), Res. Tech., Bio. & Agri'l. Engr.	2675	847-1955
200-B Weaver, Box 7625; Rt. 1, Box 414-A, 27614		
Woodlief, Martin C., Res. Asst., Univ. Res. Unit 1	2713	847-4089
4616 Reedy Creek Rd., Box 7601; Rt. 1, Wake Forest 27587		
Woodlief, Rodney-Ann D., (Don), Acct. Tech., IFC Co-op., Stu. Publ., Stu. Dev./Publ.	2413	772-7293
3134 Univ. Stu. Ctr., Box 7306; 301 Coachman Dr., Garner 27529		
Woodman, Dr. James N., (Lynn), Vis. Res. Assoc., For.	2891	
Box 8001; 4820 Connell Dr., 27612		
Woodruff, Virginia M., Acct. Clk., For. Resou.	2883	851-5916
2030 Biltmore, Box 8001; 3033-A Kings Ct., 27606		
Woodrum, Dr. Eric M. (Roseanne), Assoc. Prof., Soc. & Anth.	2491	639-2018
234 1911 Bldg., Box 8107; Rt. 3, Box 276, Angier 27501		
Woods, Bessie K., Hskp. Asst., Phys. Plant	3323	828-8775
Park Shops, Box 7219; 515 Freeman St., 27601		
Woods, Carole L., Bkpr., Faculty Club	828-0308	467-7397
4200 Hillsborough St., Box 8611; 1300 Moss Wood Ln., Cary 27511		
Woods, Michelle W., (Chris), Data Entry Oper., Dairy Rec. Proc. Ctr.	2075	779-5108
Leazar, Box 7623; 7416 Cy Ln., 27603		
Woodson, Kathleen C., Acct. Tech., Agri. & Life Sci.	2716	787-5064
120 Patterson, Box 7601; 3939 Glenwood Ave., 318, 27612		
Woodward, David K. (Nancy), Res. Tech., Zool.	2741	772-2967
2115 Gardner, Box 7617; 3810 Woodside Rd., Garner 27529		
Woolard, Betty S., Acct. Tech., Agri'l. Ext. Admin.	3158	266-1110
120 Patterson, Box 7601; Rt. 2, Box 150-C, Knightdale 27545		
Wooldridge, Oscar B., (Tew), Coord. Emer., Rel. Aff., Stu. Aff.		876-2058
905 Langford Pl., 27609		
Wooldridge, Renee M., (Mark Dowell), Comp. Programmer, Admn. Comp. Serv.	3640	481-0778
1212 Blue Ridge Rd., Box 7227; 512 2 Tartan Cir., 27606		
Wooten, Robert (Robbie) W., Agri'l. Res. Tech., Hort. Sci.	2685	834-7583
Hort. Grnhse., Box 7609; 315 E. Lane St., 27601		
Work, Dr. Robert W., Prof. Emer., Text. Chem.	2551	839-0439
12 Clark Labs., Box 8302; Whitaker Glen, Apt. 105A, 501 E. Whitaker Mill Rd., 27608		
Worsham, Dr. A. Douglas, (Linda), Prof., Crop Sci.	2511	782-4157
4402A Williams, Box 7620; 4005 Picardy Dr., 27612		
Worsley, George, (Reba), Vice Chan. for Fin. & Bus.	2155	782-9596
B Holladay, Box 7201; 4904 Larchmont Dr., 27612		
Worth, Natalie S., (Stephen), Clk.-Typ., Fin. Aid	2421	779-3456
213 Peele, Box 7302; Rt. 1, Box 275-2, Apex 27502		
Worth, Thomas T., (Gladys), Hskp. Asst., Phys. Plant	3323	834-3271
Park Shops, Box 7219; 712 Latta St., 27607		
Worthington, S. Jill, (Jeff), Sys. Acct., Fin. Off. Sys. Staff	3640	782-4878
1212 Blue Ridge Rd., Box 7227; 7401 Ebenezer Church Rd., 27612		
Worthington, Steve M., (Carrie), Agri'l. Res. Tech., Hort. Sci.	3346	851-5108
59 Kilgore, Box 7609; 2804 Campbell Rd., 27604		
Wortman, Diane E., Acct. Pay. Clk., SSS	2161	851-4726
SSS, Box 7224; 2834 Avent Ferry Rd., Apt. 202, 27606		
Wortman, Dr. Jimmie J., (Lynne), Prof., Elec. & Comp. Engr.	2336	489-4485
434 Daniels, Box 7911; Rt. 12, Box 192, Chapel Hill 27514		
Wrenn, Linda P., (John R.), Admn. Asst., Lifelong Educ.	2265	821-3268
145 McKimmon, Box 7401; 1400 Riverview Rd., 27610		
Wright, Billy R., (Gilda), Vehicle Oper., Phys. Plant	3800	
Recla. Ctr., Box 7219; Lot 27, Marshall Mobile Home Park, Louisburg 27549		

Name, Title, Department and Address	Office Phone	Resid. Phone
Wright, Brenda S., (Lorenza), Sec., Collect. Dev., Technical Serv.	2841	
1137 Library, Box 7111; 5104 Melbourne, 27606		
Wright, Carolyn. Vis. Lect., For. Lang.	2475	872-6405
113 1911 Bldg., Box 8106; 1312 F Steinbeck Dr., 27609		
Wright, Dr. Charles G., (Velma), Prof., Ent.	2748	787-1811
4317 Gardner, Box 7613; 4221 Arbutus Dr., 27612		
Wright, Cynthia D., Food Serv. Asst., Univ. Dining	3963	
Dining Hall, Box 7307; 3212 Brentwood Rd., 27604		
Wright, Donna S., (Malcolm), Teach. Tech., Bot.	2727	375-5134
2210 Gardner, Box 7612; Rt. 1, Box 386-A, Zebulon 27597		
Wright, Dorothy W., (John), Sec., Zool.	2631	496-6281
4103 Gardner, Box 7617; Rt. 1, Box 287A, Louisburg, 27549		
Wright, Gilda T., (Billy), Libr. Clk., Photocopy	2343	821-7404
Library, Box 7111; Lot 27, Marshall Mobile Home Park, Louisburg 27549		
Wright, Grace A., Acct. Clk., Accts. Pay.	2158	779-7137
213 Admn. Serv. Ctr., Box 7204; 8512 Brandon Miller, Garner 27529		
Wright, James A., Data Entry Oper., Admn. Comp. Ctr., Data Proc.	2459	851-7773
B12 Peele, Box 7208; 5421 Apt. 5, Portree Pl., 27606		
Wright, James E., Mach. Oper., Phys. Plant	3800	
Recla. Ctr., Box 7219; 625 W. Lenoir St., 27601		
Wright, Dr. James F., (Helen), Vis. Prof., Micro., Path. & Parasit., SVM	829-4379	848-6774
4700 Hillsborough St., Box 8401; 8508 E. Lake Ct., 27612		
Wright, Leco J., Hskp. Asst., Phys. Plant	3323	834-9959
Park Shops, Box 7219; 610 Dortha Dr., 27603		
Wright, Phyllis J., Empl. Rel. Spec., Human Resou.	2135	
Admn. Serv. Ctr., Box 7210; 3419 Mill Run, 27612		
Wright, Dr. Stephen J., Asst. Prof., Math.	3796	
360 Harrelson, Box 8205		
Wright, Terry M., Patrol Off., Public Safety	3206	
Field House, Box 7220		
Wu, Joyce C., (Shie Shin), Lab. Res. Spec., Biochem.	2581	848-4064
29 Polk, Box 7622; 1904 Fawndale Dr., 27612		
Wyatt, William C., (Janet), Res. Tech., Wood & Paper Sci.	2881	469-9918
Hodges Lab., Box 8005; 319 Winston Dr., Cary 27511		
Wyche, Mildred D., (Dock), Laborer, Phys. Plant	3408	828-2893
Sullivan Dr., Box 7219; Rt. 3, Box 34, Wake Forest 27587		
Wynn, Dr. Tommy E., (Carolyn), Assoc. Prof. & Grad. Administrator, Bot. ...	3341	782-0462
2717-B Bostian, Box 7611; 3514 Carriage Dr., 27612		
Wynne, Dr. Johnny C., (Diane), Prof., Crop Sci.	3281	467-2939
840 Method Rd., Unit 3, Box 7629; 1209 Balmoral Dr., Cary 27511		
Wyrick, Dr. Deborah B., Asst. Prof., Engl.	3863	787-4346
287 Tompkins, Box 8105; 2533 York Rd., 27608		

Y

Yancey, Dr. Edwin L., (Betty), Dist. Chm., Agri'l. Ext.	2690	848-8210
301 Ricks, Box 7604; 7212 St. Ledger Dr., 27612		
Yang, Senshan, Vis. Scientist, Ent.	2638	
840 Method Rd., Unit 1, Box 7628		
Yarborough, Danny, Laborer, Phys. Plant	3408	772-1819
Sullivan Dr., Box 7219; 105 Center St., Garner 27529		
Yarborough, Willie E., Janitor, Univ. Graphics	2131	828-7379
Sullivan Dr., Box 7226; 4409 Martha St., 27610		
Yarborough, Fred W., (Geldine), Hskp. Asst., Phys. Plant	3323	833-0558
Park Shops, Box 7219; 1312 N. King Charles, 27610		
Yarborough, Angela G., (Philip L.), Libr. Asst., Acqs., Libr.	3187	467-1448
3124 Library, Box 7111; 130 Meadow Dr., Cary 27511		
Yarborough, Dianne W., (Richard), Sec., Bot.	2727	772-6213
2214 Gardner, Box 7612; 1510 Kennon Rd., Garner 27529		
Yates, Dr. Daniel J., Resid., Theriogenology, SVM	829-4200	
4700 Hillsborough St., Box 8401		

Name, Title, Department and Address	Office Phone	Resid. Phone
Yates, Rudenia P., Hskp. Supv., Phys. Plant Park Shops, Box 7219; 732 Bailey Dr., 27610	3323	833-5187
Yeargan, Frances P., (Thomas), Acct. Clk., Water Resou. Res. Inst. 225 Page, Box 7912; 101 New Rand Rd., Garner 27529	2815	772-1576
Yeh, Dr. Yei-Yu, Asst. Prof., Psy. 713 Poe, Box 7801; 1011 Wirewood Dr., Apt. 304, 27605	2254	839-5686
Yeung, Ching Kit, (Chuu Ni Chang), Lab. Mech., Chem. Engr. 7 Riddick; Box 7905; 205 Chamberlain St., 27607	2324	821-5872
Yionoulis, Mary N., (George), In Charge Engr. Comm., Engr. 6 Page, Box 7901; P.O. Box 5352, 27650	3848	848-1584
York, Dr. Alan C., (Jackie), Ext. Spec., & Assoc. Prof., Crop Sci. Ext. 4401D Williams, Box 7620; 3123 Ligon St.; 305 Latimer Rd., 27609	2594	781-7832
York, Edward B., (Mildred), Supplies Supv., Buyer, Mdse. Div., SSS SSS, Box 7224; 4809 Glen Forest Dr., 27612	2161	787-9644
York, Emory K., (Patsy), Agri'l. Res. Tech., Soil Sci. 4302 Williams, Box 7619; Rt. 1, 112 Evelyn Dr., Knightdale 27545	2645	266-3774
Younan, Suzanne N., Clk.-Typ., McKimmon Ctr. 139 McKimmon, Box 7401; 414 Ryan Rd., Cary 27511	2277	469-2246
Young, Birdie M., Food Serv. Asst., Univ. Dining Dining Hall, Box 7307; Box 113, Rt. 1, Youngsville 27596	3963	
Young, Brenda C., Area Dir., Housing & Resid. Life 208 Harris, Box 7315; Owen, Box 7315, 27607	2406	6409
Young, Charles H., Hskp. Asst., Phys. Plant Park Shops, Box 7219; 701 Grantland Dr., 27610	3323	833-3379
Young, Dr. Clyde T., (Cathie), Prof., Food Sci. 236-B Schaub, Box 7624; 1226 Walnut St., Cary 27511	2964	467-4446
Young, Dr. David A., (Irene), Prof. Emer., Ent. 3308 Gardner, Box 7613; 612 Buck Jones Rd., 27606	2620	
Young, Eloise, (Calvin), Hskp. Asst., Phys. Plant Park Shops, Box 7219; 204 Heck St., 27601	3323	834-5489
Young, Dr. Eric, (Martina), Assoc. Prof., Hort. Sci. 250 Kilgore, Box 7609; 312 Hemlock St., Cary 27511	3166	467-8575
Young, Howard, (Ann), Floor Maint. Asst., Phys. Plant Park Shops, Box 7219; 2820 Wyncote, 27603	3323	828-6453
Young, J. B., (Nancy), Agri'l. Res. Tech., Plant Path. 3405 Gardner, Box 7616; 1260 Donaldson Ct., Cary 27511	2751	467-2110
Young, James G., (Diane), Carpenter, Phys. Plant Park Shops, Box 7219; Rt. 2, Box 102, Dunn 28334	3323	892-3608
Young, Dr. James H., (Lou), Prof. Bio. & Agri'l. Engr. 127 Weaver, Box 7625; 4104 Pepperton Dr., 27606	3101	851-5099
Young, Dr. James N., (Noel), Prof. Emer., Soc. & Anth. 1005 Canberra Pl., Florence, SC 29501	803-667-6754	
Young, Lucy M., Hskp. Supv., Phys. Plant Park Shops, Box 7219; 1104 Bunche Dr., 27610	3323	833-5925
Young, Malpheus F., (Carol), Res. Tech., Crop Sci., USDA 3127 Ligon St., Box 7631; 3200 Campbell Rd., 27606	3905	851-0919
Young, Dr. Margaret S., (Ervin H.), Assoc. Prof., Comp. Ani. & Sp. Species Med.-SVM 4700 Hillsborough St., Box 8401; 5106 Tudor Pl., Durham 27713	829-4231	544-4864
Young, R. Earl, Gen. Utility Wkr., Motor Pool Sullivan Dr., Box 7219; 3402 Atlantic Ave., 27604	2179	
Young, Dr. Robert V., (Suzanna), Prof., Engl. 244 Tompkins, Box 8105; Box 109, Talicud Tr., Apex 27502	3870	362-5540
Young, Dr. Talmage B., (Kathryn), Assoc. Prof. Emer., Occup. Educ. 300 Poe; 5249 Vann St., 27606	2234	851-3961
Youngblood, Anderson G., Res. Aide, Poul. Sci. Univ. Res. Farm 2, Box 7608; 716 Three Willows, Garner 27529	3446	772-9230
Younts, Bryce R., (Hazel), Dir., Alumni Rel. Alumni, Box 7503; 3712 Eakley Ct., 27606	3375	851-0235
Youtt, George R., Lect., Phys. Educ. 2027 Carmichael, Box 8111; 6601-B Lake Hill Dr., 27609	2487, 2488	848-4774
Yow, S. Kay, Women's Basketball Coach, Athl. 2A Case Athl. Ctr., Box 8501; 1407 Laughridge Dr., Cary 27511	2880	467-2655
Yu, Nancy R., (Tim), Monographic Cat. Librn., Libr. 1121 Library, Box 7111; 8508 Southfield Pl., 27614	2603	847-9991

Z

Zack, Thomas W., (Ashlee), Micro-Lab. Supv., For. Resou.	3276	528-2439
3016 Biltmore, Box 8001; Rt. 1, Box 302A, Creedmoor 27522		
Zambrana, Eduardo, Sales Clk., SSS	2161	
SSS, Box 7224; 1242 Kimbolton Dr., Cary 27511		
Zeblicky, Sherrie, Food Serv. Supv., Univ. Dining	3963	
Dining Hall, Box 7307		
Zeidman, Rebecca G., (Steve), Admn. Sec., Comp. Sci.	7926	
122-A Daniels, Box 8206; 6747 Chauncey Dr., 27609		
Zeiger, Dr. Donald C., Assoc. Prof. Emer., Hort. Sci.		
Box 7609; 623 Lennox Pl., Hendersonville 28739		
Zentara, Sara Joan, (Daniel Kamykowski), Res. Asst., Mar., Earth & Atmos. Sci.	7894	467-7582
128 Withers, Box 8208; 1110 Brookgreen Dr., Cary 27511		
Zering, Dr. Kelly D., (Patricia Cowper), Asst. Prof., Ext. Ec. & Bus.	3884	469-2787
213-B Hillsborough Bldg., Box 8110; 118 Dynastv Dr., Cary 27511		
Zerrer, J. T., Ag. Res. Tech. I, Ani. Sci.	772-6711	779-0183
Randleigh Farm, Box 7621; 917 7th Ave. Apt 6205, Garner 27529		
Zia, Dr. Paul Z., (Dora), Prof. & Head, Civil Engr.	2352	787-6583
208 Mann, Box 7908; 2227 Wheeler Rd., 27607		
Zieczik, Dr. Adam J., (Margaret), Res. Assoc., Ani. Sci.	2504	834-3621
227 Polk, Box 7621; 3901-B Greenleaf St., 27606		
Zielinski, Dr. William J., Vis. Lect., Zool.	3494, 2741	851-2656
Box 7617; 5411 A Center St., 27606		
Zimmerman, Clementine F., (Harold), Res. Tech., Plant Path.	2721	833-0515
2417 Gardner, Box 7616; 439 Glenbrook Dr., 27610		
Zingraff, Dr. Matthew T., (Rhonda), Assoc. Prof., Soc. & Anth.	3114	834-9896
312 1911 Bldg., Box 8107; 600 Beaver Dam Rd., 27607		
Zobel, Dr. Bruce J., (Barbara), Prof. Emer., For.	3410	851-3156
301 Biltmore, Box 8002; 915 Walnut St., Cary 27511;		
Rt. 4, Box 441, Penny Rd., 27606		
Zorowski, Dr. Carl F., (Louise), R. J. Reynolds Prof., Mech. & Aero. Engr. & Dir., IMSE Inst.	3808	787-0937
2332 Broughton, Box 7915; 4513 Pitt St., 27609		
Zorowski, Kristine A., Patrol Off., Public Safety	3206	
Field House, Box 7220		
Zuckerman, Dr. Gilroy J., (Cindy), Prof., Ec. & Bus.	3884	467-2174
211-D Hillsborough Bldg., Box 8110; 1010 Sturdivant Dr., Cary 27511		
Zumwalt, Dr. Lloyd R., (Joan), Prof. Emer., Nuc. Engr.	2304	834-3195
3124 Burlington, Box 7909; 10 Dixie Tr., 27607		

UNIVERSITY COMMITTEES

1986-1987

AD HOC COMMITTEE FOR THE HANDICAPPED

Faculty and Staff:

William L. Ballenger
Lee Brettman
Jeff Compher
Patricia A. Davis
Harold C. Griffin
Ronnie Hazen
Miles Heckendorn
Sotello V. Long
Bruce MacDonald
W. Huntley McKinnon
Conrad H. Miller
Frank J. Pozo
Marvin Richards

Ex officio:

Lawrence M. Clark
Carolyn H. Maidon

Student Members:

Derek Davis
Kenny Kirk
Walter Perry
Denise Wood

Mary Frances Hester
Katherine Klein
Nancy B. Martin
Alice R. Miller
Wilma Peebles-Wilkins
LeRoy C. Saylor
Thomas H. Stafford Jr.
William B. Toole III
Nellie L. Waltner

ART ACQUISITIONS

Faculty:

Michael Pause, *Chair*
Caroline S. Carlton
David N. Hyman
Julia G. May
Hayne Palmour
Richard E. Peterson
Donald G. Simmons
Conrad W. Weiser
Dr. Harry C. West, *Senate*

Ex officio:

Charlotte Brown
Lucy Coulbourn
Claude E. McKinney
1 Student Member

ADMISSIONS

Faculty:

Myron W. Kelly, *Chair*
D. Keith Cassel, *Senate*
Fred R. DeJarnette
Thomas Johnson
Katherine W. Klein
Arthur B. Moss
Jae Y. Park
Wilma C. Peebles
H. David Shew
Robert M. Turner

Ex officio:

Dean of Admissions (Anna P. Keller)

Student Members:

Clarence M. Hauer
Stony Medlin

ATHLETICS COUNCIL

Faculty:

	Expires
Richard D. Mochrie, <i>Chair</i>	1988
D. Keith Cassel, <i>Senate</i>	
Lawrence M. Clark	1989
Julie G. McVay	1987
Frederick O. Smetana	1988
Beth E. Wilson	1987
Augustus M. Witherspoon	1987

Alumni:

Kenneth L. Johnson	1987
Herbert P. McKim Jr.	1989
James E. Stewart	1988

Student Members:

Steve P. Isenhour	1987
Anne Marie Treadway	1987
Tommy Williamson	1987

Ex officio:

Chancellor (Bruce R. Poulton)
Athletics Director (James T. Valvano)

AFFIRMATIVE ACTION

Faculty and Staff:

Lawrence M. Clark, *Chair*
Durwood F. Bateman
Robert D. Bereman
Gordon A. Berkstresser
George Bland
Lauren J. Brisky
Terrence M. Curtin
Deborah Dalton
Carl J. Dolce
Marie Green
Francis J. Hassler

BIOSAFETY

Faculty:

Frank B. Armstrong, *Chair*
Glenn C. Bewley
Frederick J. Fuller
R. L. Hoffman
B. L. Macdonald
E. Stuart Maxwell
Ralph L. Mott

Ex officio:

Philip B. Carter, *Senate*
Franklin D. Hart, *Research*

Community:

Mildred A. Kerbaugh (*Dir., State Lab. & Public Health*)
William H. Wilson (*N.C. Medical Care Commission*)

CAMPUS STORES

Faculty:

Nicholas J. Rose, *Chair*
Conrad Miller, *Senate*
Duane F. Neuman

Ex officio:

Asst. Vice Chancellor for Business (Charles Leffler)
3 Student Members

CHANCELLOR'S ADVISORY COUNCIL ON WOMEN'S AFFAIRS

Faculty and Staff:

Frances M. Richardson, *Chair*
Yevonne S. Brannon
Molly H. Glander
Gail W. O'Brien
Beulah M. Parker
Mary C. Williams

Ex-officio:

Carolyn H. Maidon
2 Student Members

COMMENCEMENT

Faculty:

Don C. Locke, *Chair*
Frank M. Hammond
Thomas N. Hammond
Carmine A. Prioli, *Senate*
Jack L. Shannon

Ex officio:

Elizabeth Poulton
Liaison/Student Affairs (Ronald C. Butler)
3 Student Members

COMMITTEE ON COMMITTEES

(All members Ex officio)

Provost, Chair (Nash N. Winstead)
Assoc. Provost (Murray S. Downs)
Chm., Fac. Sen. (James E. Smallwood)
Immed. Past Chair, Fac. Sen. (Sondra L. Kirsch)
Vice Chm., Fac. Sen. (Thomas L. Honeycutt)
Vice Chan., Stu. Aff. (Thomas H. Stafford Jr.)

COURSES AND CURRICULA

Faculty:

Kerry S. Havner, *Chair*
John E. Bassett
Robert L. Beckmann
Albert S. Boyers
James L. Cole
Charles Corte
Robert H. Dorff
Michael J. Evans
Joyce Hatch, *Senate*
Michael Pause
Joseph P. Roise
Charles Tomasino
Johnny C. Wynne

Ex officio:

Assoc. Provost (Murray S. Downs)

EXTENSION, LIFELONG EDUCATION AND INSTRUCTIONAL TELEVISION

Faculty:

David M. Jenkins, *Chair*
Frederick T. Corbin, *Senate*
James K. Ferrell
John Fetrow
Linda P. Fuller
Edward T. Funkhauser
Robert B. Hazel
Judith E. Mock
Thomas L. Russell
Robert G. Savage
Gary W. Smith
Michael L. Walden

Ex officio:

University Extension (Grover Andrews)
Computing Center (Samuel Averitt)
2 Student Members

FACULTY HOSPITALITY AND ORIENTATION

Faculty:

Cheryl A. DiBucci, *Chair*
A. Lynn Berle, *Senate*
Caroline Carlton
Shanna L. Chastain
Janice R. Christensen
Larry R. Jewell
Trevor J. Little
Carolyn S. Love
Thomas O. Manning
Jon Mauney
Conniesue B. Oldham
Jean M. Porter
Sofus Simonsen

Ex officio:

Elizabeth Poulton
Lucie Hunter
Liaison, Chancellor's Off. (William H. Simpson)
Woman's Club President (Ann Collins)

FEE APPEALS

Faculty:

Mary L. Walek, *Chair*
Gerald R. Baughman
T. W. Evans
Awatif E. Hassan, *Senate*

Ex officio:

Dir., Stu. Accts. (William R. Styons)
Housing (Mark Denke)
Registration (Martha M. Welch)
2 Student Members

O. MAX GARDNER AWARD

Faculty:

J. Ben O'Neal, *Chair*
Arthur L. Aronson
William R. Carter
Charles B. Davey
Frank E. Guthrie
Gerald Lucovsky
Gary Mock, *Senate*
Gene Namkoong
Slater E. Newman

GOVERNMENT

Faculty:

Mohan Sawhney, *Chair*
Sondra L. Kirsch
Carolyn R. Miller
Richard D. Mochrie
Sarah A. Rajala
Linda W. Sanders

Term Expires

1987
1989
1989
1988
1988
1987

GRADUATE SCHOOL ADMINISTRATIVE BOARD

Faculty:

Debra W. Stewart, *Chair*
Robert D. Bereman
James K. Ferrell
Raymond E. Fornes
Augustus M. Witherspoon

Term Expires

1989
1988
1987
1987
1989
1989
1987
1989
1988
1987

Faculty Senate (Thomas W. Reiland)

Graduate Student Assn. (George Hodge)
Research (Howard W. Etzel)

GROUP INSURANCE AND BENEFITS

Faculty and Staff:

R. David Mustian, *Chair*
A. C. Barefoot
Page Billingsley
Talmadge T. Brown, Jr.
Ronita Caldwell
Curtis Fitzgerald
William S. Galler
Hassan A. Hassan
John P. Huggard
Margaret R. Hunt
Deborah Lane
Raymond C. Long, *Senate*
LeRoy B. Martin
Nancy Moxley
Katie B. Perry
Reggie J. Powell
Paul S. Stone
Paul W. Thayer
Michael H. Theil
Richard J. Thomas
John L. Wasik

Ex officio:

Payroll & Benefits Officer (Jill Worthington)
Payroll and Benefits Officer (Fran Weston)
Rep., Provost's Off. (Henry Schaffer)
Rep., Agri'l. Ext. (Joseph F. Brooks)
Health Services, Student Affairs (Jerry Barker)
Retired Faculty (David W. Chaney)

HARRELSON FUND

Faculty:

James C. VanderKam, *Chair*
Subhash K. Batra
Ann C. Howe
Jonathan K. Ocko, *Senate*
Lewis W. Seagondollar
Robert C. Serow

Ex officio:

Student Affairs (Henry Bowers)
2 Student Members

INSTITUTIONAL HISTORY AND COMMEMORATION

Faculty:

Doris E. King, *Chair*
Joseph R. Clary
T. Waller George, *Senate*
Dennis W. Hazel
Ronald E. Kemp
Marion L. Miles
James V. Pressley
Odell Uzzell

Ex officio:

Vice Chancellor, Development (John T. Kanipe Jr.)

Univ. Archives (Maurice S. Toler)

Dir., Alumni Rel. (Bryce R. Younts)

Dir., Univ. Rel. (Albert B. Lanier Jr.)

7 Students Members (2 *Ex officio*)

INTELLECTUAL PROPERTY

Faculty and Staff:

Franklin D. Hart, *Chair*

Winsor Alexander

Leroy Coggins

Becky French

William H. Johnson

Earl N. Pulliam

John S. Risley

William K. Walsh

INTERNATIONAL PROGRAMS

Faculty:

Arthur L. Sullivan, *Chair*

G. L. Carter

David J. DeMaster

R. Alan Donaldson

Richard R. Johnson

Richard A. King

Jan Laarman

Elizabethann O'Sullivan, *Senate*

Daniel C. Richardson

Pedro A. Sanchez

Ronald E. Stinner

James M. Wallace

Ex officio:

Coord., Int'l. Progs. (Lawrence Apple)

Dir., N. C. Japan Center (John Sylvester Jr.)

Graduate Sch. (Augustus M. Witherspoon)

Int'l. Stu. Adv. (Donald Roberts)

Rep., Stu. Aff. (Cindy Chalou)

2 Student Members

KEY HAVEN

Faculty

R. C. Axtell, *Chair*

Shoshana Serxner, *Treasurer*

William M. Adams

Glen R. Bathke

C. R. Gardner

D. Michael Jackson

Richard J. Leuba

Ralph McGregor

John S. Strenkowski

David W. Turner

Ex officio:

Vice Chancellor, Business (Charles Leffler)

LABORATORY ANIMAL CARE AND FACILITIES

Faculty:

C. W. McPherson, *Chair*

G. L. Catignani

R. E. Cook

Beverly A. Gilroy

Ernest Hodgson

Jay F. Levine

Robert M. Petters

Frank P. Ward, Jr.

U. G. Whitworth

Term Expires

1987

1987

1988

1989

1987

1989

1989

1987

1989

Ex officio:

Assoc. Vice Chancellor, Research (Philip B. Carter)

LIBRARY

Faculty:

Herman A. Berkhoff, *Chair*

Richard H. Bernhard, *Senate*

Richard R. Braham

Joseph W. Cunningham

Richard D. Gilbert

Suzanne T. Purrington

J. Patrick Rand

P. Nelson Reid

James E. Standaert

Ex officio:

Dir., Libraries (I. T. Littleton)

5 Student Members

PHYSICAL ENVIRONMENT

Faculty and Staff:

Phillip S. Rea, *Chair*

Angelo Abbate

Bonnie L. Baker

Kenneth R. Barker

Paul Cribbins

Berry Dunston

Mary Gray

Robert Nagle

Roger P. Rohrbach, *Senate*

Joel B. Rosch

Stephen Schecter

Jo Warren

Ex officio:

Dir., Campus Plan. & Const. (Edwin F. Harris Jr.)

Dir., Phys. Plant (Charles C. Braswell)

Dir., Trans. (Janis Rhodes)

Stu. Aff. (Gerald Hawkins)

Rep., Univ. Planning Committee (Charles Moreland)

6 Student Members

RADIATION PROTECTION COUNCIL

<i>Faculty and Staff:</i>	Term Expires
John F. Roberts, <i>Chair</i>	1988
Lawrence M. Ballas	1988
Lawrence H. Bowen	1988
William C. Dougherty	1987
James A. Knopp	1989
Ralph McGregor	1989
Michael R. Metcalf	1988
J. Richard Mowat	1988
James A. Mulholland	1987
Raymond Saxe, <i>Senate</i>	1987
Ingeborg Simonsen	1989

Ex officio:

Rad. Prot. Officer (D. William Morgan)
Liaison, Phys. Plant (John O. Clapp)
Life Safety Serv. (Bruce Macdonald)
Nuc. Reactor Prog. (Thomas C. Bray)

REACTOR SAFEGUARDS ADVISORY GROUP

<i>Faculty:</i>	Term Expires
Jimmie J. Wortman, <i>Chair</i>	1987
Wesley O. Doggett	1989
Hayne Palmour	1988

Ex officio:

Rad. Prot. Officer (D. William Morgan)

REGISTRATION, RECORDS AND CALENDAR

Faculty:

Halbert H. Carmichael, *Chair*
 Mohamed M. Fikry, *Senate*
 David W. Johnston
 Thomas W. Joyce
 Roy A. Larson
 Charles F. Lytle

Ex officio:

Registrar (James H. Bundy)
Rep., Lifelong Educ. (John F. Cudd)
Rep., Provost's Off. (Murray S. Downs)
 5 Student Members

RESEARCH

Faculty:

Carl L. Bumgardner
 Philip B. Carter, *Senate*
 Robert E. Cook
 Cathy L. Crossland
 Thomas S. Elleman
 Edward Erickson
 Russ Lea
 Robin Moore
 Leonard Pietrafesa
 Edith D. Sylla
 Ching S. Teng
 Elizabeth C. Theil
 Paul A. Tucker
 Jimmy J. Wortman

Ex officio:

Vice Chancellor, Research Admin.
 (F. D. Hart)
Contracts & Grants Officer (Earl Pulliam)
Immediate Past Chairman (Thomas LeVere)

RESEARCH REVIEW COMMITTEE ON INFECTIOUS DISEASES AND MICROORGANISMS

Faculty:

Herman Berkhoff
 Lee Campbell
 Leroy Coggins
 James Lecce
 Mike Levy
 Richard Noble
 Leo Parks

RESIDENCE LIFE

Faculty:

George B. Blum, *Chair*
 Judith A. Green, *Senate*
 Rachel K. Kinlaw
 Rebecca Leonard
 John J. Paulos
 Tommy E. Wynn

Ex officio:

Rep., Residence Life
 (Cynthia P. Bonner)
 (Mark Denke)
 5 Student Members

RETIRED FACULTY

Faculty:

John Bailey, *Chair*
 Lloyd Fleisher
 Bert Garcia
 Leon Harkins
 William L. Klarman
 Howard Miller
 Ray Noggle
 Lavon Page, *Senate*
 Hubert Park

Ex officio:

Provost (Nash N. Winstead)

SAFETY COUNCIL

Faculty and Staff:

George H. Wahl, *Chair*
 J. Carl Allred
 Scott Bertness
 James W. Cook
 Robert E. Cook
 Mark Denke
 R. Wayne Friedrich
 Terry E. Frye
 Dennis Jackson

Don Keener
Tommy Lassiter
Bob Maimone
Lee R. McDonald
Robert Metzger
Marie Ministero
Zeph Putnam
James Reviere
Rosina Rubes
William H. Simpson
Richard Sykes

Ex officio:

Radiation Protection Off. (D. W. Morgan)
Life Safety Services (Bruce Macdonald)
2 Student Members

SCHOLARSHIPS AND STUDENT AID

Faculty:

Anne C. Clapp, *Chair*
David M. Benson
George H. Blessis
Henry S. Brown
Richard H. Cornell
Doris L. Laryea
Thomas J. Sheets, *Senate*
Robert W. Wenig

Ex officio:

Fin. Aid Officer (Carl O. Eycke)
Senior Assoc. Athl. Dir. (Frank Weedon)
Rep., Alumni Rel. (Bryce R. Younts)
Dean, Admissions (Anna Keller)
4 Student Members

SCHOOL/UNIT SEXUAL HARASSMENT CONTACT PEOPLE

Jerry Barker (*Student Health Service*)
Lauren Brisky (*Finance and Business*)
Henry Brown (*Physical and Mathematical Sciences*)
Lawrence Clark (*Provost's Office*)
Brad Craig (*Agriculture and Life Sciences*)
Linda Fuller (*D. H. Hill Library*)
Molly Glander (*Counseling Center*)
Marie Green (*Veterinary Medicine*)
Mary Frances Hester (*University Extension*)
Bonnie Hine (*Computing Center*)
Peyton Hudson (*Textiles*)
Pat McLean (*University Relations*)
Barbara Parramore (*Education*)
Frances Richardson (*Engineering*)
Frank Weedon (*Athletics*)
Elisabeth Wheeler (*Forest Resources*)
Susan Wilchins (*Design*)
Mary Williams (*Humanities & Social Sciences*)

STUDENT HEALTH

Faculty and Staff:

Judith A. Davis, *Chair*
Jim D. Garlich
Gwen McCormick
Rex R. Smith
Elizabeth Suval, *Senate*
James R. Troyer

Ex officio:

Coord., Stu. Health Serv. (Jerry W. Barker)
7 Student Members

TEACHING EFFECTIVENESS AND EVALUATION

Faculty:

Richard A. King, *Chair*
Chandra Cox
John L. Crow
Dennis E. Garoutte
J. Michael Grimwood
Peyton B. Hudson
Richard R. Johnson, *Senate*
Thomas W. Reiland
Elizabeth A. Stone
Elisabeth A. Wheeler

Ex officio:

Assoc. Provost (Murray S. Downs)
Chairman, Academy of Outstanding Teachers (George T. Barthalmus)
Rep., Institutional Research (Brenda H. Rogers)
Pres., Grad. Stu. Assoc. (George Hodge)
6 Student Members

UNIVERSITY ACADEMIC COMPUTER PLANNING

Faculty and Staff:

Henry E. Schaffer, *Chair*
Sam Averitt
W. L. Ballenger
H. Leo Buckmaster
Leroy Coggins
Howard W. Etzel
G. David Garson
William L. Hafley
Thomas L. Honeycutt, *Senate*
Thomas Johnson
Siamak Khorram
Charles Leffler
Carl W. Malstrom
Benjamin T. McDaniel
Ralph McGregor
Thomas K. Miller III
John F. Monahan
Debra Stewart
John Tector
Robert K. White

UNIVERSITY DINING

Faculty:

Lynn G. Turner, *Chair*
Kathy C. Bull
James L. DeWitt
Glenda M. Herman
Walter M. High, *Senate*
Brian W. Sheldon

Ex officio:

Rep., Stu. Affairs (Henry Bowers)
Rep., University Dining (Arthur L. White)
5 Student Members

USE OF HUMAN SUBJECTS
IN RESEARCH

Faculty:

Ian S. Longmuir, *Chair*
Claudia G. Allen
Lynne E. Baker-Ward
Mary K. Witges Bengtson
Edward V. Caruolo
Beverly A. Gilroy
Thomas J. Monaco, *Senate*
William H. Sonner
Allen F. Stein
Kay M. Troost
T. Robert Mullinax, *Off-campus Rep.*

Term Expires

1989
1989
1990
1987
1989
1987
1987
1988
1990
1990

Ex officio:

Assoc. Dean, Research (Howard W. Etzel)
2 Student Members

FACULTY SENATE OFFICE

James E. Smallwood, Chair
2319 Library, Box 7111
Phone: 2279

Thomas L. Honeycutt, Vice Chair
122 Daniels, Box 8206
Phone: 7001

Elizabeth M. Suval, Secretary
318 1911 Bldg., Box 8107
Phone: 3114

Rose M. Autry, Stenographer
2319 Library, Box 7111
Phone: 2279

FACULTY SENATE MEMBERSHIP 1986-1987

Name	Term Ends	School	Box	Phone
Abbate, Angelo	1986	Design	7701	2203
Beezer, Bruce	1988	Education	7801	3127
Berle, Lynn	1988	SHASS	8111	2487
Bernhard, Richard	1988	Engineering	7906	2362
Boles, Michael	1987	Engineering	7910	3024
Cassel, Keith	1988	SALS	7619	2643
Clark, Roger	1987	Design	7701	3051
Corbin, Fred	1988	SALS	7620	3267
Coster, John	1987	Education	7801	2234
Dillman, Richard	1988	SVM	8401	829-4257
Fikry, Mohamed	1987	Engineering	7902	2356
George, Waller	1988	Textiles	8301	3253
Green, Judieth	1988	G. Constituency	7306	2961
Hale, Francis J.	1988	Engineering	7910	2365
Hassan, Awatif	1988	For. Resources	8002	2891
Hatch, Joyce	1987	PAMS	8206	7027
High, Walter	1987	G. Constituency	7111	2603
Honeycutt, Thomas L.	1988	PAMS	8206	7001
Johnson, Richard	1987	Engineering	7910	3241
Joyce, Thomas	1987	For. Resources	8005	2888
Long, Raymond	1987	SALS	7620	3216
Miller, Conrad	1987	SALS	7609	3167
Mock, Gary	1987	Textiles	8302	2551
Monaco, Thomas	1987	SALS	7609	3133
Moncol, Daniel	1987	SVM	8401	829-4200
Ocko, Jonathan	1987	SHASS	8108	2484
O'Sullivan, Elizabethann	1988	SHASS	8102	2481
Page, Lavon	1988	PAMS	8205	7909
Prioli, Carmine	1987	SHASS	8105	3870
Reiland, Thomas	1987	PAMS	8203	2531
Rohrbach, Roger	1987	SALS	7625	3101
Saxe, Raymond	1988	Engineering	7909	2302
Sheets, Thomas	1988	SALS	8604	3391
Suval, Elizabeth M.	1987	SHASS	8107	3114
Kirsch, Sondra	1987	Past-Chairman	8004	3276
Winstead, Nash		Provost	7101	2195

FACULTY SENATE 1986-1987

STANDING COMMITTEES

ACADEMIC POLICY COMMITTEE

Awatif Hassan, *Chair*
Michael Boles
Waller George
Richard Johnson
Carmine Prioli

COMMUNICATIONS COMMITTEE

Thomas Honeycutt, *Chair*
Keith Cassel
Gary Mock
Raymond Saxe
Harry West

CONSTITUTION AND BYLAWS COMMITTEE

Raymond Long, *Chair*
Angelo Abbate
Thomas Monaco
Daniel Moncol
T. J. Sheets

ENVIRONMENTAL POLICY COMMITTEE

Roger Rohrbach, *Chair*
Fred Corbin
Robert Dillman
M. M. Fikry
Lavon Page

EXECUTIVE COMMITTEE

James E. Smallwood, *Chair*
Roger Clark
Francis J. Hale
Awatif Hassan
Walter High
Thomas Honeycutt
Sondra Kirsch, *Past Chair*
Raymond Long
Roger Rohrbach
Elizabeth Suval

PERSONNEL POLICY COMMITTEE

Francis J. Hale, *Chair*
Bruce Beezer
Conrad Miller
Elizabethann O'Sullivan
Thomas Reiland

STUDENT AFFAIRS COMMITTEE

Roger Clark, *Chair*
John Coster
Judieth Green
Joyce Hatch
Thomas Joyce
Jonathan Ocko

WOMEN'S CONCERNS *AD HOC* COMMITTEE

Walter High, *Chair*
Lynn Berle
Richard Bernhard
Elizabeth Suval

ADMINISTRATIVE COUNCIL

Chancellor, <i>Chairman</i>	Bruce R. Poulton
Vice Chancellor and Provost	Nash N. Winstead
Vice Chancellor for Development	John T. Kanipe Jr.
Vice Chancellor for Extension and Public Service	W. L. Turner
Vice Chancellor for Finance and Business	George Worsley
Vice Chancellor for Research	Franklin D. Hart
Vice Chancellor for Student Affairs	Thomas H. Stafford Jr.
Vice Provost and Dean, Graduate School	Jasper D. Memory
Dean, Agriculture and Life Sciences	J. E. Legates
Dean, Design	Claude E. McKinney
Dean, Education	Carl J. Dolce
Dean, Engineering	Larry K. Monteith
Dean, Forest Resources	Eric L. Ellwood
Dean, Humanities and Social Sciences	William B. Toole III
Dean, Physical and Mathematical Sciences	Garrett Briggs
Dean, Textiles	Dame Hamby
Dean, Veterinary Medicine	Terrence M. Curtin
Dean, Admissions	Anna Keller
Director, Athletics	James T. Valvano
Director, University Relations	Albert B. Lanier Jr.
Chair, Faculty Senate	James E. Smallwood

STAFF

University Counsel	
Secretary of the University	William H. Simpson
Executive Assistant to the Chancellor	Karen R. Peterson
Director, Institutional Research	Richard D. Howard

BUILDING and ENERGY LIAISON PHYSICAL PLANT DIVISION

Building/Area	Building Liaison	Energy Conservation Liaison
Administrative Services Center	Jack Hubbard	Jack Hubbard
Agri. and Life Sciences Research Annex	W. H. Johnson	W. H. Johnson
Alumni Building		
Alumni Relations	Cathy Rackley	Cathy Rackley
Purchasing	Katherine Suggs	Katherine Suggs
Armory Shops Building	Ed Norris	John Clapp
Athletic Areas (Outside)	Richard Sykes	Richard Sykes
Biltmore Hall	Nancy Roberts	Nancy Roberts
Robertson Wing	Nancy Roberts	Nancy Roberts
Biological Sciences Headhouse and Greenhouse	W. L. Klarman	W. L. Klarman
	Ray Wilder (Alt.)	Ray Wilder (Alt.)
	J. A. Daughtry (Alt.)	J. A. Daughtry (Alt.)
Bostian Hall	C. F. Lytle	C. F. Lytle
Bragaw Computer Terminal Room (Rm 147)	George Stancil	George Stancil
Brooks Hall	Winifred Hodge	Terry Frye
110 Brooks Ave. (Turner House)	John Dodson	John Dodson
Broughton Hall		
Computer Terminal Room (Rm. 1404)	George Stancil	George Stancil
Engineering (Including Diesel)	George O. Batton	George O. Batton
Bureau of Mines	J. S. Risley	J. S. Risley
	Leslie B. Sims (Alt.)	Leslie B. Sims (Alt.)
Burlington Nuclear Laboratories		
Computer Science (Rms. 1204 & 1205)	N. F. Williamson	N. F. Williamson
	Leslie B. Sims (Alt)	Leslie B. Sims (Alt.)
Computer Terminal Room (Rm. 1139)	George Stancil	George Stancil
Engineering Research	Geoffrey McGaughey	Geoffrey McGaughey
Nuclear Engineering (Includes Marine Sciences)	Garry Miller	Garry Miller
Carmichael Gymnasium	Jack Shannon	Jack Shannon
	Elaine Harris (Alt.)	Elaine Harris (Alt.)
Carter-Finley Stadium	Richard Sykes	Richard Sykes
Case Athletics Center	Bob Robinson	Bob Robinson
Cates Ave. Steam Plant	Carl Fulp	John Clapp
Central Stores	Charles Fowler	Charles Fowler
Chancellor's Residence	Pat Hannon	John Clapp
Clark Infirmary	Jerry Barker	Jerry Barker
Cotton/Soybean Lab (Ligon Rd.)	R. F. Wilson	R. F. Wilson
Cox Hall		
Dean's Area	Leslie B. Sims	Leslie B. Sims
Physics	Tom Hill	Tom Hill
	Leslie B. Sims (Alt.)	Leslie B. Sims (Alt.)
Statistics	Bill J. Stines	Bill J. Stines
	Leslie B. Sims (Alt.)	Leslie B. Sims (Alt.)
Cultural Center	Larry Campbell	Larry Campbell
Dabney Hall		
Biochemistry (Rms. 308, 316, and Cold Room)	Samuel Tove	Samuel Tove
	Joan Johnson (Alt.)	Joan Johnson (Alt.)
Chemistry	Curtis G. Harris	Curtis G. Harris
	Kenneth W. Hanck	Kenneth W. Hanck
	Leslie B. Sims (Alt.)	Leslie B. Sims (Alt.)
Computer Terminal Room (Rm. 120)	George Stancil	George Stancil
Placement Center	Walter B. Jones	Walter B. Jones

Building/Area	Building Liaison	Energy Conservation Liaison
Daniels Hall		
Computer Graphics Center	Scott Ross	Scott Ross
Computer Science	N. F. Williamson	N. F. Williamson
	Leslie B. Sims (Alt.)	Leslie B. Sims (Alt.)
Computer Terminal Room (Rm. 118)	George Stancil	George Stancil
Electrical Engineering	N. A. Masnari	N. A. Masnari
International Programs	J. Lawrence Apple	J. Lawrence Apple
Microelectronics Center	Richard Kuehn	Richard Kuehn
Physics	Tom Hill	Tom Hill
	Leslie B. Sims (Alt.)	Leslie B. Sims (Alt.)
David Clark Laboratories		
Textiles	William A. Gardner	William A. Gardner
	Gene G. Floyd (Alt.)	Gene G. Floyd (Alt.)
Radiation Protection	D. W. Morgan	D. W. Morgan
Dearstyne Avian Research Center		
Physiology Building	J. E. Marion	J. E. Marion
and Nutrition Building	Larry Rozier (Alt.)	Larry Rozier (Alt.)
D. H. Hill Library	Donald S. Keener	Donald S. Keener
Erdahl-Cloyd Wing		
Food Services Area	Art White	Art White
Library	Donald S. Keener	Donald S. Keener
North Campus Bookstore	Jim Garrison	Jim Garrison
Dining Hall	Zeph Putman	Zeph Putman
Field House (Riddick)	Sgt. C. Renee Wood	Sgt. C. Renee Wood
Forest Resources Annex	Bob Maimone	Bob Maimone
Fraternity Housing	Robert S. Bryan Jr.	Robert S. Bryan Jr.
Gardner Hall		
Botany	E. D. Seneca	E. D. Seneca
Entomology	R. L. Hines	R. L. Hines
Genetics	C. L. Carroll	C. L. Carroll
Microbiology	L. W. Parks	L. W. Parks
	Jerry Boles (Alt.)	Jerry Boles (Alt.)
Plant Pathology	Ray Wilder	Ray Wilder
	W. L. Klarman (Alt.)	W. L. Klarman (Alt.)
	J. A. Daughtry (Alt.)	J. A. Daughtry (Alt.)
Zoology	J. G. Vandenberg	J. G. Vandenberg
Grinnells Lab		
Animal Science	E. V. Caruolo	E. V. Caruolo
Entomology Areas	G. C. Rock	G. C. Rock
Extension Service (Computers)	Edward Mrozek Jr.	Edward Mrozek Jr.
Harrelson Hall		
Mathematics	Donald Hansen	Donald Hansen
	Leslie B. Sims (Alt.)	Leslie B. Sims (Alt.)
University Studies	Mary Morgan	Mary Morgan
Harris Hall	G. G. Hawkins	G. G. Hawkins
Hillsborough Building		
Administrative Computing		
Services	H. Leo Buckmaster	H. Leo Buckmaster
Computing Center	Carl Allred	Carl Allred
Economics Area	Earnest Carraway	Earnest Carraway
3710 Hillsborough (Universal Equip. Bldg.)	T. J. Sheets	T. J. Sheets
Hodges Wood Products Lab	Nancy Roberts	Nancy Roberts
Holladay Hall	Patrice Hill	Patrice Hill
Horticulture Headhouses & Greenhouses	P. N. Lineberger	P. N. Lineberger
	W. H. Johnson (Alt.)	W. H. Johnson (Alt.)
Information Booth	Janis Rhodes	Janis Rhodes
Japan Center	Carol Tharrington	Carol Tharrington
Kilgore Hall	A. A. De Hertogh	A. A. De Hertogh
E. S. King Village	Eli Panee	Eli Panee
Landscape Services	Frank Bynum	John Clapp
Laundry	Wilton Gower	Wilton Gower

Building/Area	Building Liaison	Energy Conservation Liaison
Leazar Hall		
Finance & Business Areas	Mary Wallace	Mary Wallace
Computer Sciences	Don Martin	Don Martin
	Leslie B. Sims (Alt.)	Leslie B. Sims (Alt.)
Dairy Records	K. R. Butcher	K. R. Butcher
Physical Plant	George Lynch	John Clapp
School of Design	Winifred Hodge	Terry Frye
Link	Joyce J. Barbour	Joyce J. Barbour
Mann Hall		
Civil Engineering	P. H. McDonald	P. H. McDonald
Computer Terminal Room (Rm. 222)	George Stancil	George Stancil
McKimmon Center	Denis Jackson	Denis Jackson
MEAS Building	Paul Blankinship	Paul Blankinship
Method Road Greenhouse Complex	W. H. Johnson	W. H. Johnson
	Neil T. Robertson (Alt)	Neil T. Robertson (Alt.)
Morris Building	Page Billingsley	John Clapp
Motor Pool	Randy Bowen	John Clapp
Mycotoxin Lab	J. E. Marion	J. E. Marion
	Larry Rozier (Alt.)	
Nelson	William A. Gardner	William A. Gardner
	L. T. Lassiter (Alt.)	L. T. Lassiter (Alt.)
1911 Building		
Agriculture	A. C. Davis	A. C. Davis
Humanities & Social Sciences	Clarke Davis	Clarke Davis
Sea Grant Program	Ronald G. Hodson	Ronald G. Hodson
219 Oberlin Rd.	Betty Dunn	Betty Dunn
Page Hall		
Engineering	Jemma S. Rayfield	Jemma S. Rayfield
Water Resources	Linda Lambert	Linda Lambert
Park Shops Building		
Industrial Engineering	Darrell B. Rice	Darrell B. Rice
Physical Plant	Berry Dunston	John Clapp
Parking Areas	Sam Penny	Sam Penny
Patterson Hall	R. W. Gay Jr.	R. W. Gay Jr.
Peele Hall	Ronald Butler	Ronald Butler
Phytotron	R. J. Downs	R. J. Downs
Poe Hall	Rosina Rubes	Rosina Rubes
Polk Hall		
Animal Science	Jackie S. Riggsbee	Jackie S. Riggsbee
Biochemistry	Samuel B. Tove	Samuel B. Tove
	Joan Johnson (Alt.)	
Price Music Center	Perry Watson	Perry Watson
Reclamation Center	Randy Bowen	John Clapp
Reproductive Physiology Research		
Lab.	Jack H. Britt	Jack H. Britt
Residence Halls	Mark Denke	Mark Denke
Reynolds Coliseum		
Athletics	Dick Farrell	Dick Farrell
ROTC (Air Force)	Col. Cleveland Simpson	Col. Cleveland Simpson
ROTC (Army)	LTC Howard K. Fisher Jr.	LTC Howard K. Fisher Jr.
Ricks Hall	David Jenkins	David Jenkins
Riddick Lab		
Material Engineering (Includes Annex)	Geoffrey McGaughey	Geoffrey McGaughey
Industrial Engineering	John Ekwall	John Ekwall
Chemical Engineering	Barry King	Barry King
Riddick Stadium Stands		
Central Stores	Charles Fowler	Charles Fowler
Physical Plant	Page Billingsley	John Clapp
Schaub Hall	John Miles	John Miles
	V. A. Jones (Alt.)	V. A. Jones (Alt.)
Scott Hall	J. E. Marion	J. E. Marion
	Larry Rozier (Alt.)	

Building/Area	Building Liaison	Energy Conservation Liaison
Small Animal Facility	Nathaniel Smith	Nathaniel Smith
Snackbar and Vending Machine Areas	Walt Barkhouse	Walt Barkhouse
Sorority Housing	Robert S. Bryan Jr.	Robert S. Bryan Jr.
Students Supply Stores (Main Store)	Jim Garrison	Jim Garrison
Frank Thompson		
Craft Shop	Conrad Weiser	Conrad Weiser
Military Supply	Linda Evans	Linda Evans
All other areas	John Andrews	John Andrews
Tompkins Hall	Virginia Aldridge	Virginia Aldridge
Tucker Resid. Hall		
Computer Terminal Rm.	George Stancil	George Stancil
TV Station	Hazel "Mac" Maddrey	Hazel "Mac" Maddrey
	D. Douglas Bullock (Alt.)*	D. Douglas Bullock (Alt.)*
University Graphics	Scott Bertness	Scott Bertness
University Student Center		
Food Service	Art White	Art White
Student Center	Henry Bowers	Henry Bowers
	Lee R. McDonald	Lee R. McDonald
	Herbert Strickland	Herbert Strickland
Student Publications	Evelyn Reiman	Evelyn Reiman
Varsity Drive Facility (Entomology Extension)	P. S. Southern	P. S. Southern
Veterinary Medicine School	Daniel J. Moncol	Daniel J. Moncol
Weaver Laboratories	Robert G. Gaines	Robert G. Gaines
	F. G. Hassler (Alt.)	
Weisiger-Brown	Richard Sykes	Richard Sykes
Weed Control Lab	A. D. Worsham	A. D. Worsham
Williams Hall		
Crop Science	R. C. Long	R. C. Long
	Billy Caldwell (Alt.)	Billy Caldwell (Alt.)
Soil Science	R. H. Miller	R. H. Miller
Winston Hall		
Humanities & Social Sciences	Laura Parker	Laura Parker
Telephone Exchange	Olive Stone	Olive Stone
Withers Hall		
Chemistry	Jimmy Stephenson	Jimmy Stephenson
	Leslie B. Sims (Alt.)	Leslie B. Sims (Alt.)
Marine, Earth and Atmospheric Sciences	Henry Brown	Henry Brown
	Leslie B. Sims (Alt.)	Leslie B. Sims (Alt.)
Yarbrough Dr. Steam Plant	Carl Fulp	John Clapp

*In Chapel Hill Office

ACADEMIC CALENDAR NORTH CAROLINA STATE UNIVERSITY

1986-1987

FALL SEMESTER

Friday, August 22	Registration/Change Day (Late Registration, Drop/Add)
Monday, August 25	First day of classes
Monday, September 1	Holiday
Tuesday, September 2	Last day to add a course without permission of instructor
Monday, September 8	Last day to add a course; last day to withdraw or drop a course with a refund; last day for undergraduate students to drop below 12 hours
Monday, September 22	Last day to withdraw or drop a course at the 400 level or below without a grade; last day for all students to change to credit only
Friday, October 3	Mid-semester reports due
Friday, October 10	Fall vacation begins at 10 p.m.
Wednesday, October 15	Classes resume at 7:50 a.m.
Friday, October 24	Last day to withdraw or drop a course at the 500 or 600 level without a grade
Wednesday, November 26	Thanksgiving vacation begins at 1 p.m.
Monday, December 1	Classes resume at 7:50 a.m.
Friday, December 5	Last day of classes
Monday, December 8-	Final examinations
Tuesday, December 16	

SPRING SEMESTER

Tuesday, January 6	Registration Day/Change Day (Late Registration, Drop/Add)
Thursday, January 8	First day of classes
Wednesday, January 14	Last day to add a course without permission of instructor
Wednesday, January 21	Last day to add a course; last day to withdraw or drop a course with a refund; last day for undergraduate students to drop below 12 hours
Wednesday, February 4	Last day to withdraw or drop a course at the 400 level or below without a grade; last day for students to change to credit only
Wednesday, February 18	Mid-semester reports due
Friday, February 27	Spring vacation begins at 10 p.m.
Monday, March 9	Classes resume at 7:50 a.m.
Friday, March 13	Last day to withdraw or drop a course at the 500 or 600 level without a grade
Monday, April 20	Holiday
Friday, April 24	Last day of classes
Monday, April 27-	Final examinations
Tuesday, May 5	
Saturday, May 9	Commencement

FIRST SUMMER SESSION

Monday, May 18	Registration Day/Change Day
Tuesday, May 19	First day of classes
Wednesday, May 20	Last day to add a course without permission of instructor
Monday, May 25	Last day to add a course; last day to withdraw or drop a course with a refund
Friday, May 29	Last day to withdraw or drop a course at the 400 level or below without a grade
Friday, June 5	Last day to withdraw or drop a course at the 500 level without a grade
Monday, June 22	Last day of classes
Tuesday, June 23-	Final examinations
Wednesday, June 24	

SECOND SUMMER SESSION

Monday, June 29	Registration Day/Change Day
Tuesday, June 30	First day of classes
Wednesday, July 1	Last day to add a course without permission of instructor
Friday, July 3	Holiday
Monday, July 6	Last day to add a course; last day to withdraw or drop a course with a refund
Friday, July 10	Last day to withdraw or drop a course at the 400 level or below without a grade
Friday, July 17	Last day to withdraw or drop a course at the 500 level without a grade
Monday, August 3	Last day of classes
Tuesday, August 4-	Final examinations
Wednesday, August 5	



F

٤

Access Key

- can be entered by an individual in a wheelchair with no assistance
- can be entered by an individual in a wheelchair with minimum assistance

N, S, E, W.—indicates side of building with accessible entrance
 — passenger elevator

■ freight elevator

T accessible toilet

1 accessible toilet

ACCESS	NO.	BUILDING NAME
	1	Alexander Residence Hall
	2	Alumni Memorial Building
	3	Bagwell Residence Hall
	4	Beldon Residence Hall
E	5	Berry Residence Hall
	6	Biltmore Hall
	7	Bowen Residence Hall
	8	Bragaw Residence Hall
● N, T	9	Brooks Hall
● N	10	Brooks Hall Addition
N, ■	11	Broughton Hall
N	12	Burkington Engineering Lab
F	13	Bureau of Mines
	14	Carmichael Gymnasium
	15	Carroll Residence Hall
● N	16	Case Athletics Center
	17	Central Stores
	18	Chancellor's Residence

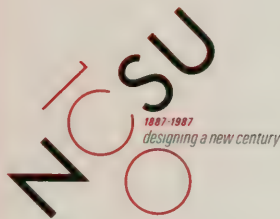
6		7		8		9			
ACCESS		NO.		BUILDING NAME		GRID		CODE	
● E, ■	S, ■	19	Clark Hall Infirmary	2-C		6-D	N		
		20	Clark Laboratories	5-D					
		21	Cal Hall	4-D					
		22	Cultural Center	5-D					
		23	Dabney Hall	4-D					
		24	Daniels Hall	4-C					
		25	McKimmion Extension Continuing Education Center	5-F					
		26	Farm Unit 5	6-F					
		27	Field House	2-C					
		28	Fraternity Court	4-F					
● W, ■	N, T	29	Gardner Hall	5-D		5-D	PHY	E	
		30	Bostan Hall	5-D					
		31	Gild Residence Hall	2-C					
		32	Williams Hall Addition	5-D					
		33	Greenhouse—Biological Sciences	5-D					
		34	Greenhouse—Horticulture	5-D					
		35	Greenhouse—840 Method Rd.	8-F					
		36	Greenhouse—Plant Pathology	5-D					
		37	Ginnells Animal Health Lab	5-E					
		38	Harrison Hall	5-D					
● W, T	S, ■	39	Harris Hall	5-D		6-D	PA	PS	PT
		40	D. H. Hill Library—Original Wing	5-C					
		41	D. H. Hill Library—Book Stack Tower	5-C					
		42	D. H. Hill Library—Erdahl-Cloyd Wing	5-C					
		43	North Campus Bookshop	5-C					
		44	Hillsborough Building	5-C					
		45	Hodges Wood Products Lab	4-E					
		46	Holladay Hall	2-B					
		47	Information Center, Visitor Parking	3-B					
		48	Kilgore Hall	6-D					
● W, T	S, ■	49	Laundry	3-C		4-D	PM	C	
		50	Leazar Hall	3-B					
		51	Lee Residence Hall	5-E					
		52	Mann Hall	4-C					
		53	E. S. King Village (17 Apt. Bldgs. A-Q)	7-F					
		54	Memorial Tower	3-A					
		55	Metcalf Residence Hall	4-D					
		56	Morris Building	3-C					
		57	Paul H. Derr Track	2-D					
		58	Miller Fields	4-E					
● W, T	S, ■	59	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		60	Miller Fields	4-E					
		61	Paul H. Derr Track	2-D					
		62	Miller Fields	4-E					
		63	Paul H. Derr Track	2-D					
		64	Miller Fields	4-E					
		65	Paul H. Derr Track	2-D					
		66	Miller Fields	4-E					
		67	Paul H. Derr Track	2-D					
		68	Miller Fields	4-E					
● W, T	S, ■	69	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		70	Miller Fields	4-E					
		71	Paul H. Derr Track	2-D					
		72	Miller Fields	4-E					
		73	Paul H. Derr Track	2-D					
		74	Miller Fields	4-E					
		75	Paul H. Derr Track	2-D					
		76	Miller Fields	4-E					
		77	Paul H. Derr Track	2-D					
		78	Miller Fields	4-E					
● W, T	S, ■	79	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		80	Miller Fields	4-E					
		81	Paul H. Derr Track	2-D					
		82	Miller Fields	4-E					
		83	Paul H. Derr Track	2-D					
		84	Miller Fields	4-E					
		85	Paul H. Derr Track	2-D					
		86	Miller Fields	4-E					
		87	Paul H. Derr Track	2-D					
		88	Miller Fields	4-E					
● W, T	S, ■	89	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		90	Miller Fields	4-E					
		91	Paul H. Derr Track	2-D					
		92	Miller Fields	4-E					
		93	Paul H. Derr Track	2-D					
		94	Miller Fields	4-E					
		95	Paul H. Derr Track	2-D					
		96	Miller Fields	4-E					
		97	Paul H. Derr Track	2-D					
		98	Miller Fields	4-E					
● W, T	S, ■	99	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		100	Miller Fields	4-E					
		101	Paul H. Derr Track	2-D					
		102	Miller Fields	4-E					
		103	Paul H. Derr Track	2-D					
		104	Miller Fields	4-E					
		105	Paul H. Derr Track	2-D					
		106	Miller Fields	4-E					
		107	Paul H. Derr Track	2-D					
		108	Miller Fields	4-E					
● W, T	S, ■	109	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		110	Miller Fields	4-E					
		111	Paul H. Derr Track	2-D					
		112	Miller Fields	4-E					
		113	Paul H. Derr Track	2-D					
		114	Miller Fields	4-E					
		115	Paul H. Derr Track	2-D					
		116	Miller Fields	4-E					
		117	Paul H. Derr Track	2-D					
		118	Miller Fields	4-E					
● W, T	S, ■	119	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		120	Miller Fields	4-E					
		121	Paul H. Derr Track	2-D					
		122	Miller Fields	4-E					
		123	Paul H. Derr Track	2-D					
		124	Miller Fields	4-E					
		125	Paul H. Derr Track	2-D					
		126	Miller Fields	4-E					
		127	Paul H. Derr Track	2-D					
		128	Miller Fields	4-E					
● W, T	S, ■	129	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		130	Miller Fields	4-E					
		131	Paul H. Derr Track	2-D					
		132	Miller Fields	4-E					
		133	Paul H. Derr Track	2-D					
		134	Miller Fields	4-E					
		135	Paul H. Derr Track	2-D					
		136	Miller Fields	4-E					
		137	Paul H. Derr Track	2-D					
		138	Miller Fields	4-E					
● W, T	S, ■	139	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		140	Miller Fields	4-E					
		141	Paul H. Derr Track	2-D					
		142	Miller Fields	4-E					
		143	Paul H. Derr Track	2-D					
		144	Miller Fields	4-E					
		145	Paul H. Derr Track	2-D					
		146	Miller Fields	4-E					
		147	Paul H. Derr Track	2-D					
		148	Miller Fields	4-E					
● W, T	S, ■	149	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		150	Miller Fields	4-E					
		151	Paul H. Derr Track	2-D					
		152	Miller Fields	4-E					
		153	Paul H. Derr Track	2-D					
		154	Miller Fields	4-E					
		155	Paul H. Derr Track	2-D					
		156	Miller Fields	4-E					
		157	Paul H. Derr Track	2-D					
		158	Miller Fields	4-E					
● W, T	S, ■	159	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		160	Miller Fields	4-E					
		161	Paul H. Derr Track	2-D					
		162	Miller Fields	4-E					
		163	Paul H. Derr Track	2-D					
		164	Miller Fields	4-E					
		165	Paul H. Derr Track	2-D					
		166	Miller Fields	4-E					
		167	Paul H. Derr Track	2-D					
		168	Miller Fields	4-E					
● W, T	S, ■	169	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		170	Miller Fields	4-E					
		171	Paul H. Derr Track	2-D					
		172	Miller Fields	4-E					
		173	Paul H. Derr Track	2-D					
		174	Miller Fields	4-E					
		175	Paul H. Derr Track	2-D					
		176	Miller Fields	4-E					
		177	Paul H. Derr Track	2-D					
		178	Miller Fields	4-E					
● W, T	S, ■	179	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		180	Miller Fields	4-E					
		181	Paul H. Derr Track	2-D					
		182	Miller Fields	4-E					
		183	Paul H. Derr Track	2-D					
		184	Miller Fields	4-E					
		185	Paul H. Derr Track	2-D					
		186	Miller Fields	4-E					
		187	Paul H. Derr Track	2-D					
		188	Miller Fields	4-E					
● W, T	S, ■	189	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		190	Miller Fields	4-E					
		191	Paul H. Derr Track	2-D					
		192	Miller Fields	4-E					
		193	Paul H. Derr Track	2-D					
		194	Miller Fields	4-E					
		195	Paul H. Derr Track	2-D					
		196	Miller Fields	4-E					
		197	Paul H. Derr Track	2-D					
		198	Miller Fields	4-E					
● W, T	S, ■	199	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		200	Miller Fields	4-E					
		201	Paul H. Derr Track	2-D					
		202	Miller Fields	4-E					
		203	Paul H. Derr Track	2-D					
		204	Miller Fields	4-E					
		205	Paul H. Derr Track	2-D					
		206	Miller Fields	4-E					
		207	Paul H. Derr Track	2-D					
		208	Miller Fields	4-E					
● W, T	S, ■	209	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		210	Miller Fields	4-E					
		211	Paul H. Derr Track	2-D					
		212	Miller Fields	4-E					
		213	Paul H. Derr Track	2-D					
		214	Miller Fields	4-E					
		215	Paul H. Derr Track	2-D					
		216	Miller Fields	4-E					
		217	Paul H. Derr Track	2-D					
		218	Miller Fields	4-E					
● W, T	S, ■	219	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		220	Miller Fields	4-E					
		221	Paul H. Derr Track	2-D					
		222	Miller Fields	4-E					
		223	Paul H. Derr Track	2-D					
		224	Miller Fields	4-E					
		225	Paul H. Derr Track	2-D					
		226	Miller Fields	4-E					
		227	Paul H. Derr Track	2-D					
		228	Miller Fields	4-E					
● W, T	S, ■	229	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		230	Miller Fields	4-E					
		231	Paul H. Derr Track	2-D					
		232	Miller Fields	4-E					
		233	Paul H. Derr Track	2-D					
		234	Miller Fields	4-E					
		235	Paul H. Derr Track	2-D					
		236	Miller Fields	4-E					
		237	Paul H. Derr Track	2-D					
		238	Miller Fields	4-E					
● W, T	S, ■	239	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		240	Miller Fields	4-E					
		241	Paul H. Derr Track	2-D					
		242	Miller Fields	4-E					
		243	Paul H. Derr Track	2-D					
		244	Miller Fields	4-E					
		245	Paul H. Derr Track	2-D					
		246	Miller Fields	4-E					
		247	Paul H. Derr Track	2-D					
		248	Miller Fields	4-E					
● W, T	S, ■	249	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		250	Miller Fields	4-E					
		251	Paul H. Derr Track	2-D					
		252	Miller Fields	4-E					
		253	Paul H. Derr Track	2-D					
		254	Miller Fields	4-E					
		255	Paul H. Derr Track	2-D					
		256	Miller Fields	4-E					
		257	Paul H. Derr Track	2-D					
		258	Miller Fields	4-E					
● W, T	S, ■	259	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		260	Miller Fields	4-E					
		261	Paul H. Derr Track	2-D					
		262	Miller Fields	4-E					
		263	Paul H. Derr Track	2-D					
		264	Miller Fields	4-E					
		265	Paul H. Derr Track	2-D					
		266	Miller Fields	4-E					
		267	Paul H. Derr Track	2-D					
		268	Miller Fields	4-E					
● W, T	S, ■	269	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		270	Miller Fields	4-E					
		271	Paul H. Derr Track	2-D					
		272	Miller Fields	4-E					
		273	Paul H. Derr Track	2-D					
		274	Miller Fields	4-E					
		275	Paul H. Derr Track	2-D					
		276	Miller Fields	4-E					
		277	Paul H. Derr Track	2-D					
		278	Miller Fields	4-E					
● W, T	S, ■	279	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		280	Miller Fields	4-E					
		281	Paul H. Derr Track	2-D					
		282	Miller Fields	4-E					
		283	Paul H. Derr Track	2-D					
		284	Miller Fields	4-E					
		285	Paul H. Derr Track	2-D					
		286	Miller Fields	4-E					
		287	Paul H. Derr Track	2-D					
		288	Miller Fields	4-E					
● W, T	S, ■	289	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		290	Miller Fields	4-E					
		291	Paul H. Derr Track	2-D					
		292	Miller Fields	4-E					
		293	Paul H. Derr Track	2-D					
		294	Miller Fields	4-E					
		295	Paul H. Derr Track	2-D					
		296	Miller Fields	4-E					
		297	Paul H. Derr Track	2-D					
		298	Miller Fields	4-E					
● W, T	S, ■	299	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		300	Miller Fields	4-E					
		301	Paul H. Derr Track	2-D					
		302	Miller Fields	4-E					
		303	Paul H. Derr Track	2-D					
		304	Miller Fields	4-E					
		305	Paul H. Derr Track	2-D					
		306	Miller Fields	4-E					
		307	Paul H. Derr Track	2-D					
		308	Miller Fields	4-E					
● W, T	S, ■	309	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		310	Miller Fields	4-E					
		311	Paul H. Derr Track	2-D					
		312	Miller Fields	4-E					
		313	Paul H. Derr Track	2-D					
		314	Miller Fields	4-E					
		315	Paul H. Derr Track	2-D					
		316	Miller Fields	4-E					
		317	Paul H. Derr Track	2-D					
		318	Miller Fields	4-E					
● W, T	S, ■	319	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		320	Miller Fields	4-E					
		321	Paul H. Derr Track	2-D					
		322	Miller Fields	4-E					
		323	Paul H. Derr Track	2-D					
		324	Miller Fields	4-E					
		325	Paul H. Derr Track	2-D					
		326	Miller Fields	4-E					
		327	Paul H. Derr Track	2-D					
		328	Miller Fields	4-E					
● W, T	S, ■	329	Paul H. Derr Track	2-D		6-E	TVS	TT	T
		330	Miller Fields	4-E					
		331	Paul H. Derr Track	2-D					
		332	Miller Fields	4-E					
		333	Paul H. Derr Track	2-D					
		334	Miller Fields	4-E					
		335	Paul H. Derr Track	2-D					
		336	Miller Fields	4-E					
		337	Paul H. Derr Track	2-D					
		33							

FREQUENTLY CALLED NUMBERS

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no text or other markings on the paper.

Centennial Commencement

CORRECTED COPY



North Carolina State University

Saturday, May 9
Nineteen Hundred and Eighty Seven
Degrees Awarded 1986-87

DEGREES CONFERRED

98th Annual Commencement North Carolina State University



*Saturday, May 9
Nineteen Hundred and Eighty-Seven
Degrees Awarded 1986-87*

A corrected issue of undergraduate and graduate degrees including degrees awarded June 25, 1986, August 7, 1986, December 16, 1986, and May 9, 1987.

TABLE OF CONTENTS

Musical Program	iii
Bruce Robert Poulton	iv
Exercises of Graduation	v
Commencement Ushers	vi
Commencement Marshals	vi
Faculty Retirements 1986-87	vi
Time and Location of Distribution of Diplomas	vii
ROTC Commissioning Ceremony	ix
Academic Costume	x
Academic Honors	x
Undergraduate Degrees	1
Professional Degrees	69
Graduate Degrees	70
Master's Degrees	78
Master of Arts Degrees	82
Master of Science Degrees	83
Doctor of Veterinary Medicine	94
Doctor of Education Degrees	95
Doctor of Philosophy Degrees	99
Alumni Distinguished Professors	121
Outstanding Teacher Awards for 1986-87	121
Awards for Achievement—1986-87	122
Army ROTC Commissionees—1986-87	129
Navy ROTC Commissionees—1986-87	129
Air Force ROTC Commissionees—1986-87	130

Musical Program

EXERCISES OF GRADUATION

May 9, 1987

Commencement Band Concert: 8:30 a.m.

Carter-Finley Stadium

Sons of the Brave Thomas Bidgood
(arr.) J. R. Watson

Manhattan Beach Sousa

Nun Danket J. S. Bach

Strategic Air Command Clifton Williams

America the Beautiful Ward-Dragon

PROCESSIONAL: 9:00 a.m.

March Processional Grundman

RECESSIONAL: (Platform Party Only)

University Grand March Goldman

NORTH CAROLINA STATE UNIVERSITY COMMENCEMENT BAND
Dr. Frank M. Hammond, Conductor

BRUCE ROBERT POULTON

Chancellor, NCSU



Chancellor Bruce Robert Poulton, the tenth chief executive officer of North Carolina State University, received his Bachelor of Science from Rutgers University, graduating with honors. His Master of Science in Nutrition and his Doctor of Philosophy in Endocrinology also came from Rutgers, and he holds a Doctor of Laws degree from the University of New Hampshire.

He has been a faculty member at Rutgers University, the University of Maine, Michigan State University, and the University of New Hampshire, and he is currently a professor of animal science at North Carolina State University.

Prior to coming to North Carolina, Dr. Poulton served as Dean of Life Sciences and then as Vice President of the University of Maine before becoming the first chancellor of the consolidated New

Hampshire University System which has four campuses and a statewide School of Lifelong Learning.

Prior to that he served in a number of top administrative posts at the University of Maine and also as executive administrator to Governor James Longley of Maine.

As chancellor of North Carolina State University, Dr. Poulton is chief academic officer and principal administrator and as such oversees educational, research and extension programs which extend from the central campus to research units, continuing education sites and extension offices across the state. The University's fields of endeavor are broad-ranging, encompassing the fields of agriculture, engineering, textiles and apparel, environmental and physical sciences, mathematics, the humanities and social sciences, forest resources, veterinary medicine and natural sciences.

Chancellor Poulton is responsible for administering an approximate annual budget of \$365 million composed of state allocated funds, federal allocated funds and grants, research grants and private gifts and endorsements. The Chancellor is responsible for developing support and university resources, working with the president of The University of North Carolina, through effective communication with the North Carolina General Assembly and Governor, and through positive interaction with foundations, federal agencies and private supporters.

Chancellor Poulton was asked by the University Commencement Committee to address the Senior Class of 1987, leading us from one century into the next during the University's Centennial celebration identified by the slogan "Designing a New Century."

Exercises of Graduation

Carter-Finley Stadium

Bruce R. Poulton, Chancellor
Presiding

May 9, 1987

PROCESSIONAL, 9:00 a.m. Frank M. Hammond
Conductor, North Carolina State University Commencement Band

The Audience is requested to remain seated during
the Processional.

WELCOME Bruce R. Poulton

INVOCATION Dr. Jerry D. Hayner
Senior Minister
Forst Hills Baptist Church
Raleigh, North Carolina

NATIONAL ANTHEM The Grains of Time

ADDRESS Chancellor Poulton

INTRODUCTIONS Chancellor Poulton

GREETINGS C. D. Spangler, Jr.
President of the University of North Carolina

CONFERRING OF DEGREES Chancellor Poulton
Candidates for Doctor of Veterinary Medicine pre-
sented by Dean of Veterinary School, Candidates for
other advanced degrees presented by Interim Dean
of Graduate School, Candidates for baccalaureate
degrees presented by Deans of Schools.

ADDRESS TO FELLOW GRADUATES Samuel Spilman
Class of 1987

RECOGNITIONS Chancellor Poulton

VALEDICTORIANS—CLASS OF 1987 Gary Louis Gilleskie
Amy Fay Moormann

ALMA MATER The Grains of Time

RECESSIONAL (Platform Party only)

Commencement Ushers

Army ROTC Ushers

Ellen D. Loy
David J. Libinski
James H. Morris III
Gregory N. Washington
Robin A. Ellerbe
Joseph A. McFaden, Jr.
Barry F. Huggins
John D. Harrison
Blair L. Hawkins
Kenneth R. Riggsbee

Navy ROTC Ushers

Mike Beacham
Chris Crislip
Scott Lesslie
Mark Schadt
Dirk Selland
Scott Syme
Douglas Voss
Tommy Womble

Air Force ROTC Ushers

Robert Bovender
William S. Brinley
James Duncan
Renee Edwards
Roy Ellis
Bobby Ingle
Erin Manning
Dexter Morgan
Grover Perdue
Darren Morton
Robert Silva
Scott Teel

Commencement Marshals

Brian Phillip Brauns
Patti Leigh Hilliard
Robert Bruce Irvine
James Frederick Jones
Tori Marie Morhard
John Walton Sanders III
John Grant Sparks
Janet Blaire Tidwell

David Lewis Fu
Sheri Lorraine Jackson
John William Jones, Jr.,
Paige Meredith Newland
Cristie Anne Sealey
Sheila Jane Stone
Christine Marie Vaughan

Trevor Gadson
Martha Jane Hutchins
Kim Johnson
Laura Gail Lunsford
Lillian Hamilton Rinker
Victor Blaine Sitton
Tiffany Ann Sweitzer
David Keith Ward

Faculty Retirements 1986-87

Ballinger, Walter Elmer, School of Agriculture & Life Sciences, will retire June 30, 1987
Cates, David Marshall, School of Physical & Mathematical Sciences, retired December 31, 1986

Clark, Edward Lewis, School of Engineering, will retire June 30, 1987

Easley, John Bynum, School of Humanities & Social Sciences, retired December 31, 1986

Gilbert, William Best, School of Agriculture & Life Sciences, retired August 31, 1986

Glazener, Edward Walker, School of Agriculture & Life Sciences, retired December 31, 1986

Gonzalez, Alan Angel, School of Humanities & Social Sciences, retired December 31, 1986

Hamby, Dame Scott, School of Textiles, will retire June 30, 1987

Haynes, Frank Lloyd, Jr., School of Agriculture & Life Sciences, will retire June 30, 1987

Hassler, Francis Jefferson, School of Engineering, will retire June 30, 1987

Heimbach, Clinton Louis, School of Engineering, will retire May 15, 1987

Hinson, Thelma Lee, School of Agriculture & Life Sciences, retired October 31, 1986

Hutchins, Robert Grant, School of Forest Resources, will retire July 31, 1987

McCollum, Robert Edmund, School of Agriculture & Life Sciences, will retire June 30, 1987

McVay, Julie Gegner, School of Education, will retire May 15, 1987

Moss, Arthur Broadus, School of Textiles, will retire May 15, 1987

Strider, David Lewis, School of Agriculture & Life Sciences, retired February 28, 1987

Tucker, Harry, Jr., School of Humanities & Social Sciences, retired December 31, 1986

Voland, Maurice Earl, School of Agriculture & Life Sciences, will retire September 30, 1987

Watkins, Rupert William, School of Agriculture & Life Sciences, will retire June 30, 1987

Wilson, James Blake, School of Physical & Mathematical Sciences, will retire June 30, 1987

Time and Location of Distribution of Diplomas

School and Department Locations

School of Agriculture and Life Sciences—1:30 p.m.

Adult and Community College Education . . . Room 1C-D, McKimmon Center,
Western Boulevard

Agricultural Business Management and Agricultural

Economics Main Floor, Reynolds Coliseum

Agronomy, Crop Science and Soil Science 2215 and 2223 Williams Hall

Animal Science Room 2, McKimmon Center

Biochemistry Room 7, McKimmon Center

Biological and Agricultural Engineering Weaver Laboratories Pavilion

Biological Sciences 3712 Bostian Hall

Biological Sciences Major

Botany

Ecology

Entomology

Genetics

Microbiology

Nutrition

Pest Management

Physiology

Plant Pathology

Toxicology

Conservation 2215 and 2223 Williams Hall

Food Science 105 Schaub-Food Science Building

Horticultural Science Arboretum, Beryl Road

Individualized Study Program Location of Major Faculty Adviser

Poultry Science Baptist Student Center, 2702 Hillsborough Street

Applied Sociology 218 Withers Hall

Zoology 2722 Bostian Hall and adjacent breezeway

Fisheries and Wildlife Sciences

Medical Technology

Zoology Majors

School of Design—1:30 p.m. Stewart Theatre

School of Education—1:30 p.m.

Administration and Supervision 220 Poe Hall

Adult and Community College

Education Room 1C McKimmon Center, Western Boulevard

Counselor Education 532 Poe Hall

Curriculum and Instruction, Special Education,

and Middle Grades Education 412 Poe Hall

Education General Studies 220 Poe Hall

Mathematics and Science

Education Room 3, McKimmon Center, Western Boulevard

School of Education cont'd.

Occupational Education; Agricultural Education; Health
Occupations Education; Industrial and Technical
Education; and Occupational Education Room 8,
McKimmon Center, Western Boulevard
Psychology 216 Poe Hall

School of Engineering—1:30 p.m.

Biological and Agricultural Engineering Weaver Laboratories Pavilion
Chemical Engineering Thompson Theater
Civil Engineering Lobby of Mann Hall
Electrical and Computer
Engineering Hayes Barton Baptist Church
1800 Glenwood Avenue
Engineering Operations 107 Page Hall
Furniture Manufacturing and Management Ballroom, Faculty Club
Industrial Engineering Ballroom, Faculty Club
Mechanical and Aerospace
Engineering University Student Center Ballroom
Materials Engineering University Room, Faculty Club
Nuclear Engineering North Portico, Burlington
Engineering Laboratories

School of Forest Resources—1:30 p.m. Area 1A and B,
McKimmon Center, Western Boulevard

School of Humanities and Social Sciences—1:30 p.m.

Accounting, Business Management,
and Economics Main Floor, Reynolds Coliseum
History 100 Harrelson
Multi-Disciplinary Studies Program
English, Foreign Languages and Literatures,
Philosophy and Religion West Raleigh Presbyterian Church,
27 Horne Street
Political Science Link Building Patio
(Rain: Link Building Lobby)
Sociology 218 Withers Hall
Speech-Communication G-107 Link Building

School of Physical and Mathematical Sciences—1:30 p.m.

Chemistry; Marine, Earth and Atmospheric Sciences;
Mathematics; Physics; and Statistics 124 Dabney
Computer Science 222 Dabney

School of Textiles—1:30 p.m. Forest Hills Baptist Church
3110 Clark Avenue

ROTC COMMISSIONING CEREMONY

COLONEL CLEVELAND SIMPSON, USAF
Presiding

Stewart Theatre
May 9, 1987

PROCESSIONAL MARCH, 4:00 p.m. Dr. Frank M. Hammond
Conductor, North Carolina State University Commencement Band
The audience is requested to remain seated until Processional music is completed

NATIONAL ANTHEM

INVOCATION Captain Patrick D. Neal
Chaplain, USA Reserve
Garner, NC

INTRODUCTIONS Dr. Bruce R. Poulton
Chancellor, North Carolina State University

ADDRESS Brigadier General Billy J. Boles
United States Air Force

ADMINISTRATATION OF OATH
OF OFFICE Lieutenant Colonel Howard K. Fisher, Jr.
Professor of Military Science
Captain Harold A. Bunch
Professor of Naval Science
Colonel Cleveland Simpson
Professor of Aerospace Studies

PRESENTATION OF CERTIFICATES Dr. Bruce R. Poulton

BENEDICTION Captain Patrick D. Neal

RECESSIONAL

The audience is requested to remain seated until the Recessional music is completed.

Academic Costume

Academic gowns represent a tradition handed down from the universities of the Middle Ages. These institutions were founded by the Church; the students, being clerics, were obliged to wear the prescribed gowns at all times. Round caps later became square mortarboards; the hoods, originally cowls attached to the gowns, could be slipped over the head for warmth.

Many European universities have distinctive caps and gowns which are different from those commonly used in this country. Some of the gowns are of bright colors and some are embellished with fur. A number of these may be noted in the procession.

The usual color for academic gowns in the United States is black. The bachelor's gown is worn closed, the master's and doctor's may be worn open or closed. The shape of the sleeve is the distinguishing mark of the gown: bachelor—long pointed sleeves; master—oblong, square cut in the back with an arc cut away in front; doctor—bell shaped.

Caps are black. The tassels for the Ph.D. degree are gold and those for other graduate and professional degrees may be of the color corresponding to the trimmings on the hoods.

Of all the components of the academic costume, the hood bears the heaviest symbolic burden. The hood must make clear the level of the degree, the faculty in which it was given, and the institution which awarded it. The level of the degree is shown by the size of the hood, the width of the velvet trimming, and in the case of doctors, by the shape. The bachelor's, master's, and doctor's hoods are three feet, three and one-half feet, and four feet long, respectively. The velvet trimming in the same order is two, three, and five inches and extends all around the hood on the exposed edge. This same trimming identifies the faculty in which the degree was awarded. For each faculty there is a corresponding color; so a glance at the trimming is all that is needed to identify the faculty. A *partial* list of the colors follows: Agriculture, maize; Architecture and Art, brown; Science, golden yellow; Economics, copper; Education, light blue; Engineering, orange; Forestry, russet; Physical Education, sage green; Religion, scarlet; Speech, silver gray; Veterinary Medicine, gray; Textiles, wine red. The following faculties have the same color—dark blue: Anthropology, History, Languages, Literature, Philosophy, Political science, Sociology.

Academic Honors

Honors participants benefit from a more individualized and rigorous approach to their desired degree through special classes, seminars and individual research.

Undergraduate degree honor designations are:

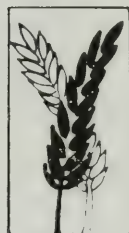
Cum Laude—for GPA 3.250 through 3.499

Magna Cum Laude—for GPA 3.500 through 3.749

Summa Cum Laude—for GPA 3.750 and above.

UNDERGRADUATE DEGREES

School of Agriculture and Life Sciences



BACHELOR OF SCIENCE IN BIOLOGICAL AND AGRICULTURAL ENGINEERING

Jointly administered by the School of Agriculture and Life Sciences and the School of Engineering. See page 19 under the School of Engineering for a listing of the graduate seniors in the jointly administered program.

BACHELOR OF SCIENCE IN CONSERVATION

Jointly administered by the School of Agriculture and Life Sciences and the School of Forest Resources.

Degrees Conferred December 16, 1986

William David McKee	Chapel Hill
Jennifer Anne Poe	Jefferson
Scott Preston Sanders	Preston, MD

Degrees Conferred May 9, 1987

Diane Lynne Lemley	Spring Lake
Karen Ann Sensenich	Morehead City

BACHELOR OF SCIENCE IN AGRICULTURAL BUSINESS MANAGEMENT

Degrees Conferred June 25, 1986

Robert James Gaskin	Albemarle
Fred Allen Spivey	Sunbury

Degrees Conferred August 7, 1986

Philip Edward Byerly	Kernersville
Samuel Lewis Robinson	Marshville

Degrees Conferred December 16, 1986

Michael Alan Anderson	Pine Level
†Warren Keith Benton	Gatesville

Norman Wray Boyette	Hurdle Mills
Susan Margaret Campbell	Bel Air, MD
Joel Watkins Coleman, Jr.	Clinton
*Tamara Lynn Hall	Greensboro
Sara Jane Patty	Raleigh

Degrees Conferred May 9, 1987

Jane Elizabeth Armour	Raleigh
Gregory Timothy Gagnon	Roswell, GA
Sherri Monique Hawkins	Germanton
Edwin Harold Shuford	Hickory
Franklin Delano Stewart II	Angier

BACHELOR OF SCIENCE IN AGRICULTURAL ECONOMICS

Degree Conferred June 25, 1986

Janice Marie Stroud	Mount Pleasant
---------------------------	----------------

Degrees Conferred December 16, 1986

Gregory Allan Gaertner	Cary
Ashley Kenneth Gilliam	Angier
Robert Larry Jones	Crewe, VA
Jeffrey Carrol McNeely	Statesville

Degrees Conferred May 9, 1987

Reginald Colbert Beeson	Sophia
Michael Keith Bone	Elm City
Jeffrey Clarence Jennings	Elizabeth City

BACHELOR OF SCIENCE IN AGRONOMY

Degree Conferred June 25, 1986

Hugh Lee Barefoot, Jr.	Clemmons
-----------------------------	----------

Degrees Conferred December 16, 1986

Calvin Dail Askew	Eure
Michael Douglas Eaker	Cary
Jose Roman Jimenez	Plasencia, Spain
Evelyn Kay Lemly	Fleetwood
Joseph McNeil Mitchell	Raleigh
**Mark Whitley Ross	Williamston

Degrees Conferred May 9, 1987

Kevin Dale Atwell	New Bloomfield, MO
H Spencer Lawrence Dean	Louisburg
Brent Forrest Jackson	Hamilton
*Kenneth Neal Kearney	Pikeville
James Leonard Propst	Maiden
***William Douglas Radford	Goldsboro
Brian James Smith	Pink Hill
Richard Barry Ward	Charlotte
Jerry Wayne Yarborough	Sanford

†Co-major

* Cum Laude

** Magna Cum Laude

*** Summa Cum Laude

H Honors Program

BACHELOR OF SCIENCE IN ANIMAL SCIENCE

Degrees Conferred June 25, 1986

***Emma Jane Kelly	Four Oaks
**Laurie Dunlap Scotton	Greensboro
**Mary Joyce Vogel	Durham

Degrees Conferred August 7, 1986

Kelly Kathleen Hagan	New Bern
***Kim Franz Helmink	Williamsburg, VA
H†***Adrian Matthews Kreeger	Pfafftown
†*Christopher Steven Morris	Lansdale, PA
Howard Kenneth Starling	Fayetteville

Degrees Conferred December 16, 1986

Kimberly Alphin Foushee	Kinston
Jacklyn Elizabeth Hazlewood	Greensboro
**Frances Renee Hinsley	Raleigh
***Edward Maris Lineberger	Belmont
**Karen Elizabeth Lloyd	Cary
Dawn Marie Longo	Chapel Hill
H Tonya Melissa Nowell	Raleigh
Benton O'Neal Paschall	Morganton
H David Bradley Petty	Rural Hall
Lee Harold Sadler	Whispering Pines
†Danny Virgil Souther	Wilkesboro
Susan Wynne Southon	Montreal, Quebec, Canada
Michael Stuart Weaver	Fayetteville
Kenneth Allen Welker	Julian

Degrees Conferred May 9, 1987

**Bruce Eric Akers	Raleigh
Linda Frances Blanchard	Greenville
James Ward Caddell	Durham
Tommy Bryan Cave	Elkin
*Garry Wade Dilday	Murfreesboro
H***Kelli McCauley Ferris	Winthrop, WA
Stirling Jeffrey Foster	Greensboro
Thomas Edison Fuller, Jr.	Greensboro
Tina Gale Goodwin	Apex
Elizabeth Ellen Gough	Winston-Salem
Andrew Van Gray	Stony Point
H Joan Marie Hardin	Fayetteville
Toni Annette Keene	Zebulon
†Gene Buron Lanier, Jr.	Burgaw
Leslie Marie Moran	Raleigh
Susan Paige Moss	Selma
Christopher Joseph Palmer	Clyde
Debbie Ruth Perkins	Concord
Lisa Michelle Redmond	Winston-Salem
Ronald Gregg Richards	Zebulon
Kenneth Dean Sasser	Hallsboro
Lloyd Alexander Smith	Sanford
H Kathryn Elizabeth Spragins	Roanoke Rapids
Karen Joyce Wade	Bahama
Boyce Gerald White, Jr.	Bladenboro
Sharon Lynn Wyatt	Goldsboro

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

BACHELOR OF SCIENCE IN BIOCHEMISTRY

Degree Conferred August 7, 1986

†John Owen Moses Raeford

Degrees Conferred December 16, 1986

Beverly Clevenger Boltin Buford, GA
Victoria Ann Carter Atlanta, GA
†Phillip Edwin Hartzog Yadkinville
Thomas Monroe Herman Hickory
Elizabeth Ann McBrayer Raleigh
†Daniel Raymond Pitts Asheville
Walter Alan Shore Haw River
William Scott Varner Cary

Degrees Conferred May 9, 1987

Everette Gray Allen Mocksville
Andrea Mabelle Baker Belhaven
H†**Cassandra Lynn Barbara Raleigh
†Peter Alan Beglin Westfield, NJ
Tina Marie Clayton Greensboro
H David Michael Cole Charlotte
**Laura Burton Ellis Atlanta, GA
David Allen Freeman Lexington
H**Clarence Michael Hauer Cary
H**Karla Renée Hauersperger Charlotte
Jeff Austin Henson Albemarle
Jennifer Lynn Maruri Laurel, MD
H†*Carle Woodruff Mason III Wilson
H***Thomas Joseph Monaco, Jr. Cary
Camellia Moses Okpodu Supply
Michael Steven Schapira Asheville
†*Daniel Gene Sinclair Washington, NJ
H†***Christina Elaine Teague Raleigh
H Amy Beth Vasu Oakboro
H**Carmen Runkle Wood Raleigh

BACHELOR OF SCIENCE IN BIOLOGICAL AND AGRICULTURAL ENGINEERING

Degree Conferred August 7, 1986

Garland Keith Clapp Greensboro

Degrees Conferred December 16, 1986

Charles Andrew Alvarez Raleigh
Craig Leroy Baird Raleigh
†Warren Keith Benton Gatesville
H*Charles Alan Clapp Greensboro
Allen Jefferson Earp Winnabow
Dwayne Alan Graham Warsaw
Ken Franklin Hayes Seagrove
Don Lee Keaton South Mills
*James Dale King West Jefferson
Marvin Randolph Sparks, Jr. Raleigh
Mark Stanley Suggs Durham
Paul Joseph Weber Wake Forest

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

Degrees Conferred May 9, 1987

Garnett Dale Bullock, Jr.	Gastonia
Douglas Bryan Clark	Brevard
Mark Alan Ellington	Eden
Barry Styles Foushee	Roxboro
**Garland Henry Goodrich	Wakefield, VA
Jefferson Lee Greer	Pink Hill
*Randall Earl Hyman	Oak City
†Gene Buron Lanier, Jr.	Burgaw
Wright Wells Lowery	Goldsboro
Bernadette Deloise Nance	Greensboro
Kalan Douglas Smith	Julian
Kelly Teresa Tindle	Charlotte
Richard Gilbert Toler	Princeton
Glen Azore Tucker	Concord
Joseph Robert Winslow	Hamilton

BACHELOR OF SCIENCE IN BIOLOGICAL SCIENCES

Degrees Conferred June 25, 1986

Theocharis Rogirou Theocharis	Limassol, Cyprus
Gregory Lawrence Wagner	Durham

Degree Conferred August 7, 1986

Nancy Campbell Knutson	Fayetteville
-----------------------------	--------------

Degrees Conferred December 16, 1986

Leigh Anne Barker	Oxford
Tonia Jean Brinson	Raleigh
Richard Gregory Burkett	Kinston
Victor James Coppola	Point Pleasant, NJ
Laura Jean Cox	Calhoun, GA
Denise Glenn Denny	Charlotte
Rachel Diane Griffith	Raleigh
**Theresa Lynn Higdon	Louisville, KY
Cynthia Diane Newlin	Siler City
Edward Joseph Schultz	Flemington, NJ
***Helen Amy Smith	Raleigh
Caroline Elizabeth Valentine	Tallman, NY
Alice Wernicki	Raleigh

Degrees Conferred May 9, 1987

Kevin Duane Anderson	Raleigh
H Wayne Courtney Balen	Devon, PA
**Robert Andrew Errico	High Point
Albert Cleve Everson, Jr.	Edenton
William Scott Gwynn	Hickory
Tammy Lynn Heustess	Clarkton
*Sherrye Patricia Lee	Dunn
†Mary Kathryn MacCormack	Raleigh
Scott Joseph Nally	Charlotte
Robert Michael Robinson	Gastonia
David Jay Schneiderman	Greensboro
H**Todd Fitzgerald Tanner	Oriental

BACHELOR OF SCIENCE IN BIOLOGICAL SCIENCES (Microbiology)

Degree Conferred June 25, 1986

Louis Ashley Barker Wendell

Degrees Conferred August 7, 1986

H**Teresa Lynn Holliday Mount Olive
Kelly Kathleen Latimer Raleigh
†David Wiley Robinette Norfolk, VA

Degrees Conferred December 16, 1986

Trace Kevin Bates Raleigh
Melinda Anne Fodrie Charlotte
LeAnder Dwaine Gray Ramseur
Shermalyn Rebecca Greene Efland
Donald Christopher Kennedy Fayetteville
Michael Kent Sakata Chapel Hill
*Billie Traywick Stallings Raleigh

Degrees Conferred May 9, 1987

H†**Cassandra Lynn Barbara Raleigh
Leticia Bouché El Paso, TX
Jorge Del Rio Lares, Puerto Rico
H**Angela Marie Frazier Raleigh
Gary Wayne Massey Burlington
Karen Annette Motsinger Lexington
Lisa Marie Price Aiken, SC

BACHELOR OF SCIENCE IN BOTANY

Degree Conferred December 16, 1986

**Neil Alan Armingeon Tuscaloosa, AL

Degree Conferred May 9, 1987

*Edwin Arthur Shearin Raleigh

BACHELOR OF SCIENCE IN FISHERIES AND WILDLIFE SCIENCES

Degrees Conferred August 7, 1986

Lori Jean Field Raleigh
Reginald Scott Lanier Lincolnton
**Alan Lewis ReBarker Dunn

Degrees Conferred December 16, 1986

John Phillip Bethea Raleigh
Lawrence Richard Hanford Raleigh
Tina Marie Odenbaugh Fayetteville
David Alan O'Donnell Southern Pines
William Irvin Snead, Jr. Richmond, VA
Paula Clay Willis Oxford
H**Annette Joyce Wilson Durham

Degrees Conferred May 9, 1987

Michael Morgan Byerly Greensboro
H**Donna Gail Dawes Raleigh
Jason Curtis Doll Knotts Island

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

Jeffrey Franklin Evans	Raleigh
Monica Wynne Hayes	North Wilkesboro
Erich Leschey Hoffman	Devon, PA
Joseph Walter Koebel, Jr.	Durham
H Mark Randall Linn	Kannapolis
H†**Lisa Marie Parker	Kitty Hawk
Michael Edward Richardson	Burlington
Donald MacDonald Seaver, Jr.	Durham
Maria Lynne Smith	Morganton

BACHELOR OF SCIENCE IN FOOD SCIENCE

Degree Conferred August 7, 1986

†*Christopher Steven Morris	Lansdale, PA
-----------------------------------	--------------

Degrees Conferred December 16, 1986

***Kim Franz Helmink	Durham
Donna Lynne Hennessy	Richboro, PA
Glenda Rene Jones	Monroe
Gail Lee Kletch	Sterling, VA
***Gray William Rushin	Raleigh
†Michael Dean Walston	Salisbury, MD
**Anna Coffin Wilson	Durham
Dorothy Renee Wise	Rocky Mount

Degrees Conferred May 9, 1987

Jorge Ronald Bowles	Santa Cruz, Bolivia
**Patricia Ruth Butcher	Kloof, South Africa
Robert Franklin Chestnut	Fayetteville
**Lisa Beth Hansen	Garner
Troy Dale Hunt	High Point
Serisa Long Johnson	Raleigh
John Charles Reitzel	Raleigh
Melanie Morrison Senter	Raleigh
Deborah Marie Shuler	Lexington
H*Sally Lynn Smith	Lexington

BACHELOR OF SCIENCE IN HORTICULTURAL SCIENCE

Degrees Conferred June 25, 1986

Patricia Anne Curry	Charlottesville, VA
Beverly Paige Davis	Holmdel, NJ

Degree Conferred August 7, 1986

H**Tina Elaine Simmons	Conover
------------------------------	---------

Degrees Conferred December 16, 1986

Elizabeth Anne Brooks	Raleigh
Susan Dawn Hardison	Fayetteville
†Sarah Ellen Merritt	Mount Airy
Martha Earp Norman	Charlotte
Charles William Rogers	Waynesville
Jeremy Richard Smearman	Raleigh

Degrees Conferred May 9, 1987

Bruce Michael Allentuck	Potomac, MD
-------------------------------	-------------

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

Jeffery Lake Amtmann	Potomac, MD
Roy Dixon Boggs III	Hickory
Lewis Christian Carver	Garner
Nelsa Ann Cox	Greensboro
Scott Anthony Eastman	Boiling Springs
Deborah Susan Edwards	Winston-Salem
*Jennifer Marie Hawk	Brevard
Kenneth William Herring	Wilmington
Anjana Banerjee Kennedy	Raleigh
H**Catherine Jane Knes-Maxwell	Huntersville
Brian Thomas Martin	Toms River, NJ
Timothy Darrow Morton	Jacksonville
Glenn Cooper Parker	Clinton
*Ronald Edward Phipps	Roxboro
H**Rocco Dale Schiavone	Columbus, GA
†*Gregory Hibberd Scott	Raleigh
Kimberly Rhea Scroggs	Virginia Beach, VA
Robert Bond Watts	Salisbury
†Johanna Del Wood	Clayton

BACHELOR OF SCIENCE IN MEDICAL TECHNOLOGY

Degrees Conferred August 7, 1986

Ruth Ann Brown	Sanford
Lisa Sue Moore	Raleigh

BACHELOR OF SCIENCE IN PEST MANAGEMENT FOR CROP PROTECTION

Degree Conferred August 7, 1986

Chuck William Teseneer	Statesville
------------------------------	-------------

Degree Conferred December 16, 1986

†Sarah Ellen Merritt	Mount Airy
----------------------------	------------

Degrees Conferred May 9, 1987

Michael Robert John Hill	Charlotte
†*Gregory Hibberd Scott	Raleigh
Lisa Joyce Wimpfheimer	Westfield, NJ

BACHELOR OF SCIENCE IN POULTRY SCIENCE

Degrees Conferred June 25, 1986

Sharon Ann Heins	Raleigh
Lori Lynn Horton	Kernersville
Toni Annette Keene	Zebulon
Rancelle Annette Rowell	Monroe
Paul Wilson Talley	Stanfield
Patricia Annette Whitaker	Mooresboro

Degrees Conferred August 7, 1986

H†***Adrian Matthews Kreeger	Pfafftown
Neal Shawn Matthews	Roseboro

Degrees Conferred December 16, 1986

***Steve Weldon Breeding	Raleigh
Robert Carlton Grady	Albertson

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

Tony Martin Musselwhite	Monroe
Robert Barrett Rose	Carrsville, VA
†Danny Virgil Souther	Wilkesboro
†Michael Dean Walston	Salisbury, MD

Degrees Conferred May 9, 1987

Anne Perry Baldridge	Raleigh
Edwin Alan Burleson	Salisbury
Clayton Marshall Norton	Raleigh
Joel William Redmond	Statesville
Allen Ray Thomas	Doswell, VA
H*John Franklin Tillett	Raleigh

BACHELOR OF SCIENCE IN SOIL SCIENCE

Degree Conferred December 16, 1986

Clayton Marshall Norton	Clarkton
-------------------------------	----------

BACHELOR OF SCIENCE IN ZOOLOGY

Degrees Conferred June 25, 1986

Rose Anne Monti Boehm	Raleigh
William Dean Bunce II	Fayetteville
***Stephanie Ann Fagerberg	Middleboro, MA
Michelle Clarice Farr	Canton
Sallie Ann Faulstich	Charlotte
H*Scott Paul Guyton	Raleigh
Deborah Lane McLendon	Greenville
Virginia Yow Stewart	Jacksonville

Degrees Conferred August 7, 1986

Susan Jane Curtis	Chapel Hill
*Cynthia Teresa Marco	Raleigh
Melody Faye Morgan	Raleigh
†John Owen Moses	Raeford
*Christopher Martin Pugh	Burlington
†David Wiley Robinette	Norfolk, VA
Winbon James Twiford III	Monroe
William Scott Varner	Cary

Degrees Conferred December 16, 1986

H*Beverly Kay Bryant	Greensboro
**Mary Denise Casey	Kinston
***Christine Marie Chelf	Fayetteville
*Richard Clifton Franklin	Raleigh
*Jan Fletcher Hawkins	Jacksonville
H**James William Haynes	Fayetteville
*Jamie Lynn Hodgin	Greensboro
***Jane Clauss Jones	Morrisville
Michael Charles McFadden	Advance
**Stephen Miles Rudd	Brown Summit
Peggy Ann Slock	Raleigh
Slater Gregory Sparks	Salisbury
Sandra Tubbs	Lynchburg, VA
Charles Robert Welch	Durham
William Benjamin Widgeon, Jr.	Morehead City

Janine Denise Wiley	Charlotte
Annette Catherine Wright	Raleigh

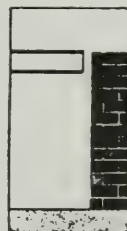
Degrees Conferred May 9, 1987

Jeanne Marie Alexander	Seven Lakes
H* Donna Gail Anderson	Kannapolis
Timothy Philip Anderson	Havelock
H* Stephen Joseph Austin	Raleigh
† Peter Alan Beglin	Westfield, NJ
H* Laura Ann Bennett	Fuquay-Varina
Bradley Carl Blackard	Raleigh
Anne Noreen Blake	Danville, VA
Mark Gregory Blanton	Richmond, VA
Timothy Alan Blizzard	High Point
Benjamin Brian Bobbitt	Wallace
Lori Anne Burke	Charlotte
Cindy Lu Byers	Wilson
William Charles Clay	Raleigh
*** Rose Marie Courie	Carolina Beach
H* Lysa Paige Deaton	Davidson
George Lane Dischinger III	Raleigh
Karla Lynn Dunn	Hickory
Tammy Lynn Edwards	Spring Hope
* Cynthia Kay Eide	Raleigh
John Ernest Ellis	Hickory
Elizabeth Blair Farrow	Engelhard
Kristopher Daniel Ford	Matthews
Eric Alan Freeman	Winston-Salem
** Philip Todd Gialenios	Charlotte
Sarah Ann Goodwin	Hertford
* Willie Kent Guion	Durham
H Robert Daniel Herbert	Hendersonville
† Barbara Ann Hotchkin	Washington, NJ
Roxanne Fletcher House	Franklinton
*** Kathleen Anne Johns	Raleigh
Roger Paul Johnson	Greensboro
H** Jonathan William Kirshtein	Charleston, SC
H†* Carle Woodruff Mason III	Wilson
David Costner McAllister	Raleigh
H* Jessica Gay McConnell	Raleigh
Dale Harper McGinnity	Raleigh
Robert Wade Mortis, Jr.	Baltimore, MD
Christine Ellen Moser	Greensboro
Deborah Anne Ogrodnik	Raleigh
Cynthia Lynn Piland	Seaboard
H* Michael Joseph Poss	Gaithersburg, MD
*** Connie Jo Robinson	Cincinnati, OH
** Greg Miles Rochelle	Chapel Hill
H*** Kevin Randolph Rust	Lumberton
Jeanne Marie Salisbury	St. Pauls
Lisa Kay Shepherd	Burnsville
H* Mark Alan Spears	Salisbury
Jeannie Reneé Spencer	Washington
David Frank Stegall	Warrenton
Reginald David Sterling	Charlotte
Teresa Celeste Stober	Greensboro

† Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

H	Vera Jo Swaringen	Greensboro
	David Harrison Taylor	Pfafftown
H†***	Christina Elaine Teague	Raleigh
H	James Jackson Teague III	Asheville
	Susan Rose Tilley	Oak Ridge
H**	Katherine Lucille Warner	Raleigh
	Michelle Lynne Wenhart	Raleigh
	Ross Wade West	Eden
H	Sean Patrick White	Selden, NY
	Tavondia Denise Williams	Greensboro
H**	Dana Allison Wilson	Pinetown
	Alisa Denise Woods	Raleigh
	James Blain Woods	Greensboro

School of Design



BACHELOR OF ARCHITECTURE

Degrees Conferred May 9, 1987

	Richard Harrison Best	Raleigh
	Harold Morrow Bowen	El Paso, TX
	David Edward Harwood	Albemarle
**	Marcos Federico Ibarguen	Saint Petersburg, FL
*	Kevin Michael Kane	Cullowhee
	Thomas Clinton McGimsey	Morganton
	Keith Curtis Morrow	Spindale
	Thomas Dalton Miller Nicholson	Charlotte
	Matthew Edward Schoenherr	Wilton, CT
*	Elizabeth Anne Snipes	Goldsboro
**	Betsy Carol West	Shelby
	Lorie Lee Zimmerman	Salisbury

BACHELOR OF ENVIRONMENTAL DESIGN

Degree Conferred June 25, 1986

	Jeanne Marie Gransee	Charlotte
--	----------------------	-----------

Degree Conferred May 9, 1987

*	George Robert Hager	Wilmington
---	---------------------	------------

BACHELOR OF ENVIRONMENTAL DESIGN IN ARCHITECTURE

Degrees Conferred June 25, 1986

	Heidi Marie Santo	Raleigh
	Jeffrey Michael Williams	Hillsborough

†Co-major

* Cum Laude

** Magna Cum Laude

*** Summa Cum Laude

H Honors Program

Degrees Conferred August 7, 1986

Scott Allen Enge	Raleigh
Matthew Edward Schoenherr	Raleigh
David Patrick Wosicki	Fairfax, VA
Jon Mirenh Zubizarreta	San Sebastian, Spain

Degrees Conferred December 16, 1986

Cynthia Louise Bandy	Matthews
Marie Lynn Barnett	Raleigh
*Lina Issam El-Hashem	Pilot Mountain
Ruben Frazier Golding	Asheville
Michael Joseph Kapp	Fayetteville
*John Barry Mayes	Gastonia
John Stanley Winstead	Charlotte

Degrees Conferred May 9, 1987

Dawn Caprice Berg	Cameron
*Beth Miller Boxley	Greensboro
*Robert Charles Chiodi	Ocala, FL
Glenn William Christner	Greensboro
Kevin Michael Coltrane	Greensboro
Jennifer Kay Edwards	Raleigh
Michael Earl Edwards	Alexandria, VA
Jeffery Frank Harkey	Fayetteville
Monica Georgette Harris	Raleigh
Nathan Charles Isley	Durham
Keith Andrew Ketcham	Bergenfield, NJ
Susanne Dixon Majesky	Wilton, CT
William Steve Martin	Bladenboro
Catherine Elisabeth Mortimer	Londonderry, NH
Robert Earl Nussear, Jr.	Greensboro
Rex Jefferson Pace	Henderson
Quinn Noel Pillsworth	Winston-Salem
*Alfred Joe Poole III	Lumberton
David Michael Reese	Raleigh
John Randolph Ruff, Jr.	Springfield, VA
John Warfield Sibert	Wilmington
**William Gilbert Spencer, Jr.	Boone
Glenn Michael Suttentfield	Orlando, FL
Glenn Allen Thomas	Raleigh

BACHELOR OF ENVIRONMENTAL DESIGN IN LANDSCAPE ARCHITECTURE

Degree Conferred June 25, 1986

**Paula Faye Gornto	Durham
---------------------------	--------

Degree Conferred August 7, 1986

Esperanza Maria Suarez	Charlotte
------------------------------	-----------

Degrees Conferred December 16, 1986

**Barbara Brooks Haislip	Raleigh
Christopher Matthew Moore	Raleigh

Degrees Conferred May 9, 1987

Charles Randolph Hudson	Chapel Hill
Michael Keem Kucera	Charlotte
Tony Michael Tate	Mebane

BACHELOR OF ENVIRONMENTAL DESIGN IN PRODUCT DESIGN

Degree Conferred August 7, 1986

Paul Michael Best	Raleigh
-------------------------	---------

Degrees Conferred December 16, 1986

Sean Berrie	Sea Bright, NJ
**Amy Carol Dodson	Winston-Salem
Marco Sixtus Ferrari	Fayetteville
**David Graham Howell	Wilson
**Billy Sherrill Ingram II	Jamestown
Phyllis Gannaway Lang	Fort Lauderdale, FL
Julia Borden Stout	Denver, CO

Degrees Conferred May 9, 1987

Timothy Clark Binford	Charlotte
Tracey Rose Carpino	Saugerties, NY
Michael Andrew Gray	Greenville, SC
Joseph Cruz Meno, Jr.	Fayetteville
**Kevin Dell Merino	Los Angeles, CA
Carol Lynn Pittman	Crestview, FL

BACHELOR OF ENVIRONMENTAL DESIGN IN VISUAL DESIGN

Degrees Conferred June 25, 1986

Michelle Catherine Bonk	Burlington
*Alfred Landon Elmore, Jr.	Charlotte
Demetre Kerry Gionis	Winston-Salem
Jeanette Louise Hodge	Kenly
***Catherine Muriel Smith	Greensboro
Jacquelyn Elizabeth Taylor	Norfolk, VA

Degree Conferred August 7, 1986

Michael Lee Strong	Raleigh
--------------------------	---------

Degrees Conferred December 16, 1986

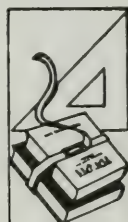
Blaine Todd Childers	Flay
Dorota Tulodziecka Gruber	Raleigh
Barbara Morris Harrington	Brevard
Kathryn Clark Hart	Durham
Deborah Snyder Lewis	Pittsburgh, PA
Karen Rose Teder	Cary
Granville Lipscomb Uzzle	Durham

Degrees Conferred May 9, 1987

***Lisa Chevonne Anderson	Raleigh
Laura Janice Comer	Greensboro
Jane Elizabeth Greene	Star

*Elizabeth Ann Hobbs	Raleigh
Steven Ray Huff	Kernersville
*Carrie Lenee Keen	Charlotte
Stephanie Ann Kiker	Statesville
**Valerie Elizabeth Laney	Greenville
*Riley Christopher Lawhorn, Jr.	Jacksonville
*Martha Rae Lewis	Raleigh
Susan Elizabeth May	Durham
Susan Player Merrell	Beaufort
*Mona Jo Phillips	Siler City
Ari Sanoff	Raleigh
April Renee Sawyer	Manteo
Kristine Genevieve Swiatocho	Raleigh
*Jeffrey Mark Williford	Fayetteville

School of Education



BACHELOR OF ARTS IN PSYCHOLOGY

Degrees Conferred June 25, 1986

Susan Michele Rutkowski	Raleigh
Robin Marshall Temple	Camden
Rebecca Blackley Worth	Chapel Hill

Degrees Conferred August 7, 1986

**Frederick Coston Beddingfield III	Zirconia
Annette Rary Griffin	Raleigh

Degrees Conferred December 16, 1986

Gloria Jean Carter	Rochester, NY
Charles Jeffery Howell	Wilson
**Susan Fine Liggin	Colorado Springs, CO
**Leslie Elizabeth Wilkie	Greensboro
***Sarah Thomason Zmick	Asheville

Degrees Conferred May 9, 1987

Paul Edwin Ancarana	Hillsborough
Angela Beth Cox	Sanford
Misty René Davis	Arden
Franklin Ervin Derr, Jr.	Hickory
Lori Ellen Eaton	Scotch Plains, NJ
Nevine Aly Elshiekh	Raleigh
**Noelle Lyn Garrou	Valdese
H*Lane Faires Geddrie	High Point
Lisa Dawn Gentry	Burlington
†*Andrea Leigh Gragg	Newland

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

H**Kevin Abbott Hodge	Raleigh
**Tonya Jean Holland	Garner
†Barbara Ann Hotchkin	Washington, NJ
Terry Eugene Hunter	Greensboro
Darryl Earl Jones	Henderson
Theresa Ann Kelly	Wilson
Véronique Anne-Marie Koenig	Greensboro
*Amy Diana McBride	Henderson
Kanoko Shinohara Nagasaka	Tokyo, Japan
Diane Lynn New	Durham
James Ross O'Neal, Jr.	Durham
*Lisa Ruth Porter	Garner
Virginia Kosec Powell	Garner
Gina Marie Reed	Cherry Hill, NJ
*Sandra Leigh Ross	Earl
Billie Faye Smith	Lillington
Carolyn Sue Smith	Mount Airy
Sharon Kathleen Smith	Raleigh
*Cheryl Faye Stallings	Belvidere
Kathryn Melanie Varner	Cary
Sherri Lynn Whittington	Coats

BACHELOR OF SCIENCE IN EDUCATION

Agricultural Education

Degrees Conferred June 25, 1986

Mary Gwendolyn Gentry	Jonesville
Bruce Tyler Pleasant	Prospect Hill

Degree Conferred August 7, 1986

James Carnie Oliver	Elizabeth City
---------------------------	----------------

Degrees Conferred December 16, 1986

Marty Warren Coates	Clarkton
Dan Barry Croom	Seven Springs
Eric Warren Honeycutt	Benson
Ann Marlette Lay	Tabor City
*David Ray McNeal	Winston-Salem
Glenn Cooper Parker	Clinton
Lisa McLamb Reynolds	Spivey's Corner
David Wayne Tyer	Kinston

Degrees Conferred May 9, 1987

H***Evelyn McAdams Browning	Efland
*Johnny Hubert Capps	Princeton
Robert Carlton Grady	Albertson
Barry Neal Honeycutt	Benson
David Marshall Lanier II	Denton
*Timothy Scott Sessions	Whiteville
***Nancy Lynne Turpen	Toms River, NJ
†Johanna Del Wood	Clayton

General Studies

Degree Conferred August 7, 1986

Joseph Marshall Edwards	Bunn
-------------------------------	------

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

Degrees Conferred December 16, 1986

Roy Thomas Austin, Jr. Suffolk, VA
Ricky Bunch Windsor

Degree Conferred May 9, 1987

***Ruth Michaels Thompson Lakewood, OH

Health Occupations Teacher Education

Degrees Conferred December 16, 1986

***Katherine Lee Stephenson Selma
*Andrea Mobley Taylor Raleigh

Degrees Conferred May 9, 1987

*Thomas Oscar Harrison Broadway
***Barbara Clegg Sanders Carthage

Industrial Arts Education

Degrees Conferred June 25, 1986

Michael James Allen Creston, OH
Frank June Anderson Danville, VA
William Frederick Czagas Burlington

Degrees Conferred August 7, 1986

David Brian Pearce Raleigh
Mark Lasater Warren Charlotte

Degrees Conferred December 16, 1986

Penny Lynn Allen Zebulon
Victor Daniels Jordan Raleigh
Charles Allan Nicholson Charlotte
William Roger Otstot Raleigh
*David Paul Trueblood Hertford
Walter Glen Weaver Raleigh

Degrees Conferred May 9, 1987

Jeffrey Scott Bullock Willow Springs
James Francis Flanagan Charlotte
David Patrick Walker North Brunswick, NJ

Mathematics Education

Degrees Conferred August 7, 1986

Parvaneh Khorsand Borek Apex
†Teresa Lynne Clewis Wilmington

Degrees Conferred December 16, 1986

†June La Verna Blackwell Morganton
Dereck Wayne Dirks Hickory
Alfred Layfeett Ferguson Roanoke Rapids
Dawn Melissa Johnson Mount Airy
Ivan Carl Roten Boone
Lynn Jeanette Snead Martinsville, VA

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

***Mary Ely Sokolski	Raleigh
*Carol Jane Tweedy	Jamestown
**Stephen Harold Vest	Aberdeen

Degrees Conferred May 9, 1987

Judy Cathren Brooks	Siler City
Leslie Jackson Carney	Sanford
Jonathan Peter Cook	Cary
Harry Calloway Dodson, Jr.	Newport
*Melanie Susan Dupree	Clayton
Vicki Lynn Feather	Raleigh
Terry Robert Gibson	Huntersville
Susan Catherine Gornak	Springfield, VA
Christina Bancroft Healy	Raleigh
Carla Felecia Jernigan	Spindale
Trisha Gay Kerr	Durham
Nanette Rae Malone	Charlotte
***Dianne Cox McDonald	Sanford
Sheri Ann Mendenhall	Mebane
*Susan Elizabeth Oddo	Charlotte
*Sharlene Bernadette Toone	Dobson
Geri Lynn Turner	Reidsville

Mathematics Education, Middle Grades Concentration

Degree Conferred December 16, 1986

Mary Catherine Buening	Charlotte
------------------------------	-----------

Degree Conferred May 9, 1987

Daltina Sue McDuffie	Robbins
----------------------------	---------

Middle Grades, Language Arts and Social Studies Concentration

Degree Conferred August 7, 1986

*Deborah Phillips Goodwin	Grenada, MS
---------------------------------	-------------

Degrees Conferred December 16, 1986

Tina Marie Hunt	Raleigh
**Patricia Ursula McFall	Henderson
*Dianna Lynn Royer	Raleigh
Wendy Lynn Smith	Raleigh
Katrina Darlene Watkins	Oxford

Degrees Conferred May 9, 1987

*Michelle Andrée Bates	Asheboro
Lorraine Elizabeth Coleman	Denton
*Gina Gold Gray	LaGrange
Mai-Huong Thi Hoang	Fayetteville
*Angela Denise Holt	Durham
Susan Lynn Runyon	Lexington

Middle Grades, Mathematics and Science Concentration

Degree Conferred December 16, 1986

Victoria Ann DeBusk	Glade Spring, VA
---------------------------	------------------

Science Education

Degrees Conferred December 16, 1986

Lawrence William Diener	Cary
Stanley Eugene McDonald	Holly Springs
Mark Randall Polk	Fayetteville
**Kelly Thomas Smith	Warsaw
Ronald Rae Willett	Sanford
Jody Lee Zorda	Unadilla, NY

Degrees Conferred May 9, 1987

Sharron Lee Davidson	Concord
***Michael Doyle Ferguson	Roanoke Rapids
Wendy Caroline Glass	Burlington
†Marcia Marie Kutter	Raleigh
†Mary Kathryn MacCormack	Raleigh
Michael Joseph Nixon	Clayton
†**Lisa Marie Parker	Kitty Hawk
Jamie Susan Payne	Statesville
Laura Ann Polcer	Brookside, NJ
Beth Ann Turner	New London

Science Education, Middle Grades Concentration

Degrees Conferred December 16, 1986

*Carole Ely Acquesta	Raleigh
Debora Hope Snell	Littleton

Technical Education

Degree Conferred June 25, 1986

Curtis Paul Davis, Jr.	Upper Marlboro, MD
-----------------------------	--------------------

Degrees Conferred December 16, 1986

Dean Warren Pennell	Albemarle
*Carl Edward Price	Lenoir

Vocational Industrial Education

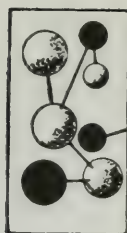
Degree Conferred December 16, 1986

Mary Elizabeth Liggins	Zebulon
------------------------------	---------

Degrees Conferred May 9, 1987

Richard Floyd Kemp	Greensboro
Walter Nowell Perry III	Raleigh

School of Engineering



BACHELOR OF SCIENCE IN BIOLOGICAL AND AGRICULTURAL ENGINEERING

Jointly administered by the School of Agriculture and Life Sciences and the School of Engineering.

Degrees Conferred August 7, 1986

Tina Marie Bruner	Raleigh
Troy Shannon James	Wilson

Degrees Conferred May 9, 1987

Mitchell Hugh Barber	Williamston
Linda Liles Blalock	Raleigh
Margaret Joyce Marie Britt	Raleigh
Danny Lee Draughn	Yadkinville
Gregory Leland Gentry	Madison
Susan Claudia Glass	Charlotte
John Adam Griffin	Pollocksville
Thomas Christopher May	Richmond, VA
Mary Elizabeth McNeil	Vilas
†Frank Jackson Small	Archdale
Randall William Thompson	Liberty
H**Timothy Scott West	Jackson
Beth Reynolds Whited	Robbins
Luther Graham Wood	Cove City

BACHELOR OF SCIENCE IN AEROSPACE ENGINEERING

Degrees Conferred June 25, 1986

John Franklin Bell	Raleigh
John Wesley Teague	Thomasville

Degree Conferred August 7, 1986

Craig Allen Williams	Dunn
----------------------------	------

Degrees Conferred December 16, 1986

*John Landon Meyer	Glasgow, MO
Richard Louis Sieg	Winston-Salem

Degrees Conferred May 9, 1987

Michael Barrett	Raleigh
*James Robert Benton	Clemmons
*Charles David Bryan	Hudson
James Scott Burd	Fayetteville
John Taylor Chaffin, Jr.	Shiloh
*Kevin Cunningham	Columbus

†Co-major

* Cum Laude

** Magna Cum Laude

*** Summa Cum Laude

H Honors Program

Richard Lee Dowdy	Southern Pines
Thomas Edward Drake	Burlington
***William Neil Dunn, Jr.	Raleigh
Jeff Alfred Fahey	Charlotte
Keith Colbert Gentle	Kannapolis
Jonathan Richard Hamilton	Raleigh
Richard Baldwin Hanes, Jr.	Charlotte
Colie Thomas Henkel	Raleigh
John Todd Hildebrand	Sherrills Ford
Paul Richard Holshouser	Sanford
Joseph William Hough	Washington, DC
*Deborah Ruth Houston	Winston-Salem
†Lucas Kuang-Che Huang	Raleigh
Julie Beth Johnston	Hickory
Robert Lodge Jones, Jr.	Raleigh
Charles Samuel Joyce	Stuart, VA
Brian Mark Killough	Lancaster, SC
Victor Robert Lessard	Durham
**Charles Robert Lewis	Sherrills Ford
Jonathon Craig McArthur	Reston, VA
Vance Edward McCormick	Jamestown
***John Robert Olds II	Spartanburg, SC
***David Peter Olynick	Raleigh
James Nelson Owenby	Old Fort
Donald Bruce Owens	Columbus
Tracy Neal Pence	Charlotte
José Ramón Perurena, Jr.	Panama, Panama
**James Michael Redmond	Charlotte
Allen Frederick Roper	West End
***Richard Morrow Ross II	Winston-Salem
Jeff Cartwright Taylor	Charlotte
***Leslie Lamonte Weaver, Jr.	Chester, VA
Clyde Andrew Weirick	Hayesville

BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

Degrees Conferred June 25, 1986

Stanley Monroe Smith	Fayetteville
**Richard Cleveland Summers	Pineville
Brian Robert Szafranski	Hopewell, VA

Degree Conferred August 7, 1986

Katherine Ann Staub	Catskill, NY
---------------------------	--------------

Degrees Conferred December 16, 1986

***Robert Chancy Blohm	Atlanta, GA
Frederick Earl Boss, Jr.	Lake Worth, FL
*Curtis Scott Bostian	Winston-Salem
**Michael Frank Bridgers	Wilson
Galen Francis Butler	Matoaca, VA
**Kurt Matthew Carlan	Charlotte
Brent Alan Carpenter	Atlanta, GA
†***James Hawkins Caudill	Clemmons
Sherri Lynne Coghill	Henderson
Barbara Coronna	Northport, NY
John Raymond Currier	High Point
Jeffrey Allen Elliott	Charlotte

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

***	Lisa Carol Gardner	Garner
***	Gary Louis Gilleskie	Durham
	Clinton Douglas Hester	Kernersville
	Christopher Graham Johnson	Hope Mills
	Janis Marie Johnson	Decatur, IL
***	Loretta Renee Kaus	Raleigh
	Kohei Kobayashi	Raleigh
†*	James Allen Krozser	Raleigh
	Margaret Ann Lancaster	Eureka
	Rebecca Neale Lindsey	Richmond, VA
	Jessie William Mayhew III	Danville, VA
	Kenneth Joseph Meek	Winston-Salem
	David Charles Meissner	Charlotte
	Melanie Fay Miller	Charlotte
	Melinda Kay Miller	Charlotte
	Misty Leticia Nance	Greenville, SC
†	Roger William Nussman	Matthews
	Pamela Faye Overby	Durham
	Jeffrey Cole Rhodes	Brevard
	Marianne Clark Rhodes	Lynchburg, VA
	George Edward Schlager	Durham
†	Gary Franklin Sharpe	Whiteville
	Lisa Renée Upchurch	Raleigh
	Tom William Wadsworth	Newtown Square, PA
***	Raymond Keith Warbington	Rolesville
***	Jamie Ellen White	Hendersonville
	James Scott Wise	Raleigh

Degrees Conferred May 9, 1987

	*Luis Guillermo Andrade	Raleigh
	Thomas Scott Barnard	Havelock
	*Ardith Elyse Beadles-Hay	Durham
***	Diane Louise Bergmann	Winston-Salem
	Peter Jan Borton	Fayetteville
***	Mei Kam Chow	Jacksonville
	John Hall Daniels, Jr.	Wilson
***	Jonathan Charles Dorofi	Charlotte
***	Gretchen Louise Elder	Ames, IA
**	Helene Marie Gassen	Charlotte
	*Pamela Annette Gentry	Greensboro
	Barry Orlando Gillespie	Pinehurst
	Elizabeth Ann Grainger	Raleigh
***	Bethany Ann Gray	Cary
†**	Charles Michael Hamilton	Charlotte
**	Kenneth James Hausle	Charlotte
	Joseph Franklin Hotter	Cary
	Todd William Hubbard	North Palm Beach, FL
	Nathan Thomas Ivey	Greensboro
†**	Mark Steven Keller	Seven Valleys, PA
	Barbara Jean Landy	Charlotte
	Kirby Allen Lewis	New Bern
	David Scott Lineback	Raleigh
	Dennis Eugene Lockhart	Charlotte
	*John Wayne Locklear	Pembroke
**	Alan Dowd Massey	Wilmington
***	Tony Neil Norwood	Manndale
	*Thomas Andrew Oberg	Monroe

†Co-major

* Cum Laude

** Magna Cum Laude

*** Summa Cum Laude

H Honors Program

Beth Ann Oliver	Fayetteville
Michael Todd Payne	Charlotte
Elaine Ann Perry	Jacksonville
John Robert Powell, Jr.	South Boston, VA
Alexandra Dorothea Prudden	Charlotte
Marvin Tyler Rakes	Winston-Salem
*Brian Watson Ranson	Charlotte
†Carol Jean Robison	Raleigh
*Thomas Clay Scarlett	Mebane
**Gregory David Schwartz	Kinston
Kathleen Pearl Sessions	Topsail Beach
***David Mark Shaw	Charlotte
Carl Frederick Singer	Wilmington
Ralph Franklin Sullivan III	Garner
Shannon Maree Vogel	North Wilkesboro
**Charles Duane Wells	Morehead City
*George Wilhelm Welsh	Charlotte
**Robert Chase Willett	Greensboro
Dana Lynn Wintzer	Columbia, SC

BACHELOR OF SCIENCE IN CIVIL ENGINEERING

Degrees Conferred June 25, 1986

Stephen Joseph Brown	Raleigh
James Paul Sahlie	Charlotte
Mary Catherine Somers	Reidsville
Frederick Lamar Stowe	Washington
Charles Arthur Willis, Jr.	Charlotte

Degrees Conferred August 7, 1986

Edward Harrison Corbett	Brooklyn, NY
Donald James Darity	Franklinville
Roland Blair Norris II	Charlotte
Nnamdi Crescent Onuoha	Imo, Nigeria

Degrees Conferred December 16, 1986

Suzanne Marie Angele	Somerville, NJ
John Gregory Arey	Charlotte
*Richard Van Argabright	Winston-Salem
John Charles Bardi	Morehead City
*James Ralph Batts, Jr.	Cary
Janice Lorraine Bobo	Lexington
Jon Kevin Brookshire	Lenoir
Diane Lynn Danner	Statesville
Douglas Maxwell Dawson	Danville, VA
Michael Springs Dixon	Belmont
Steve Anthony Drum	Hickory
John Lewis Eddy	Raleigh
Joseph Edward Foutz	Lenoir
Bette Fiss Frederick	Charlotte
John Thomas Gerber	Barnardsville
Kenneth Jeffery Greene	Lenoir
Coy Herbert Jeans III	Hendersonville
William Asa Jenkins	Wilkesboro
Karen Elaine Lee	Durham
Stacy Cobb Lee	New Bern
Alice Augusta Mahan	Fayetteville
Wendy Leigh Marshall	Engelhard

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

Nasser Mohamed Massry	Gaza Strip, Israel
Karl Siegfried Menches	Cary
Michelle Fran Miller	Newport News, VA
Marvin Daniel Rogers II	Sherrills Ford
Mark Staten Roy	Washington
*Miguel Antonio Salandra	San Salvador, El Salvador
Gregory Reid Sigmon	Gastonia
David Neal Smith	Hope Mills
Jimmy Lee Travis	Efland
Francis Durward Tyson, Jr.	Winterville
Stephen Henry Ulmer	Raleigh
David Bunnell Weems	McLean, VA
Kim Michele Whitfield	Columbia, MD
James Robert Wilson	Andrews
Tony Milton Woody	Charlotte
George Kent Yelverton	Fremont
Stephen James Yetman	Charlotte

Degrees Conferred May 9, 1987

Peter Olayinka Adeleke-Sheidun	Benin City, Nigeria
*Bonnie Faye Andrews	Bostic
Stacy Yvette Baldwin	Wilmington
George Roscoe Barbour, Jr.	Knightdale
**Roy Tilman Barker	Oxford
*John Andrew Batts	Oxford
Thomas Rogers Bickel	Wilmington
David Wayne Bramlett	Macon, GA
Dan Edelberto Brewer	Mooreville
Michael Scott Bruff	Lexington
Perry George Davis, Jr.	Etowah
Tracy Edward Davis	Raleigh
William Prince Ferrell	Apex
Thomas Paul Garrett	Virginia Beach, VA
Kevin Lee Gatton	Raleigh
David Lewis Gibson	Hendersonville
Neil Thomas Greenlee	Marietta, GA
Marlene Frances Hale	Richmond, VA
Roger Lynn Harwood	Boone
Kevin Michael Haughey	Fayetteville
Roy Smith Helms, Jr.	Monroe
Donald Robert Henricksen, Jr.	Jamestown
**Randall Stuart Hillmann	Apex
Eguavoen Uwubamwen Igbinosun	Saint Thomas, Virgin Islands
Jack Brinkley Isaacs, Jr.	Shelby
Moussa Jurjis Ishak	Raleigh
Mark Getzen Jordan	Tampa, FL
Muhie-eddine Kanawati	Baalbek, Lebanon
Christopher David Kirkman	McLeansville
***Patrick Mitchell Kyzer	Hickory
Darrick Sheffield Lee	Ahoskie
***William Edgar Lee, Jr.	Fernandina Beach, FL
Billy Gene Lester, Jr.	Stoneville
Scott Parker Liggett	Pittsburgh, PA
Constantine Limmiatis	Hendersonville
Jesse Gray Linzel, Jr.	Raleigh
Lawrence Patrick Maher	McMurray, PA
Philip Ray Mann	Covington, VA
Lisa Jean Matthews	Fayetteville

Scott David Nelson	Rochester, NY
†**Leila Ann Osteen	Rockingham
Michael Gerald Palmer	Raleigh
Michael Arlis Pettyjohn	Boonville
Gary Neal Ponds	Charlotte
*Jonathan Edward Reed	Waynesville
Paul Thomas Schrum, Jr.	Lenoir
Jeffrey Inglis Smith	Charlotte
Carol Ann Snow	Kingsport, TN
Mark Kent Stephenson	Misenheimer
Patrick Ethan Teague	Raleigh
Angela Annette Thompson	Charlotte
Carl Jonathan Triplett	Hickory
Michael Frederick Tugman	Greensboro
Kevin Johnson VanMetre	Cary
***Christina Marie Walters	Raleigh
John Curtis Weaver	Shelby
Patrick Dillard Wilson	Greensboro

BACHELOR OF SCIENCE IN CIVIL ENGINEERING— CONSTRUCTION OPTION

Degrees Conferred June 25, 1986

Mark Douglas Shaw	Williamston, MI
Lee Anthony Wagner	Asheville

Degrees Conferred December 16, 1986

Franklin Drew Brown	Wilmington
Roger Lee Brown	Julian
Christopher Lupo Cook	Whiteville
Jeffrey Heston Edmonds	Greensboro
John Carl Grey	Asheboro
Lynn Clayton Hale III	Wilmington
Jennifer Lynn Pearson	Gretna, VA
Karen Phipps	Long Beach
**David Mark Tart	Benson
Thomas Shelton Walker	Arlington, VA

Degrees Conferred May 9, 1987

Shay William Baird	Conover
Kevin Clark Elliott	Wilson
James Howard Fentress, Jr.	Virginia Beach, VA
Stephen Michael McFarland	Raleigh
Raeford Kenneth Murphy, Jr.	Raleigh
Michael Jon Obradovic	Blackstone, VA
Christopher Gordon Parishier	Grafton
Donovan Russell Phillips	Conover
Robert Leland Poetzinger	Lexington
*Michael Scott Rohrer	Concord
Steven Sawyer Sanderson	Wendell
Karen Patricia Smith	Raleigh
*John David Solomon, Jr.	Charlotte
Timothy James Sudano	Hendersonville
Lawrence Adeleke Taiwo	Chicago, IL
Gregory Dean Toler	Winterville
James Harris Wheless, Jr.	Louisburg
Charles Mayfield White IV	Warrenton

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

BACHELOR OF SCIENCE IN COMPUTER ENGINEERING

Degrees Conferred December 16, 1986

**Donald Paul Duckett, Jr.	Leicester
Steve Monroe Grimes	Bowling Green, KY
Myung-Jin Oh Hong	Seoul, Korea
Robert Patrick Knowles	Sanford
Ernest James Nath	Pittsburgh, PA
Glenn Arthur Samia	Raleigh

Degrees Conferred May 9, 1987

*Robert Howard Bloh	Winston-Salem
Jeffrey Franklin Canady	Raleigh
**Randy Lee Cramp	Maple Shade, NJ
**Jorge Alberto Jose Dada	San Salvador, El Salvador
James Donald Ennis, Jr.	Richmond, VA
*Andrew John Fish	Southern Pines
†***John Reid Hauser	Cary
Karen Elizabeth Larson	Raleigh
*Dinesh Mahbubani	Hong Kong, China
David Wayne Mills	Tabor City
John Thomas Olp	Providence
Thomas Albert Petersen	Chatham, NJ
***Kenneth Palmer Rust	Lumberton
*Karen Chenoa Vail	Garner

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

Degrees Conferred June 25, 1986

James Kevin Curtis	Apex
***Jonathan Devoy Douglas	Sanford
*Tyrone Darren Floryanzia	Sanford
David Jonathan Greeson	Graham
Michael Brian Heilman	Raleigh
James Ronald Jeffers	Raleigh
Gary Wayne Joyner	Chapel Hill
John Andrew Lessin	Los Angeles, CA
Douglas Jay Nuttall	Old Lyme, CT
*Don Steven Schmitt	Hartford, WI
Dwight Andrew Sinclair	Lynchburg, VA
*Susan Lomaine Smith	Newport News, VA
Arthur Robert Thompson	McLean, VA

Degrees Conferred August 7, 1986

Richard James Cofer	Sioux City, IA
Sonja Denise Ebron	Durham
Craig Robert Engel	Vienna, VA
Arthur Willard Farmer	Wilson
Michael Claud Ferrari	Stedman
Jerron Denard Green	Graham
**John Rudyard Hall	Raleigh
James Michael Hancock	Raleigh
Charles Keith Horner	Mechanicsville, VA
Kendall Clay Houston	Kinston
Norbert Donald Ingram	Knightdale
***Philip Joseph Johnson	Chatham Township, NJ
**Raymond Michael McKinnie	Raleigh

†Co-major

* Cum Laude

** Magna Cum Laude

*** Summa Cum Laude

H Honors Program

Timothy Hahn Medlin, Jr.	Chesapeake, VA
Doyle Ray Mitchell	Morganton
James Thomas Morrison	Durham
*Samuel Michael Musulin	Fayetteville
**Christopher Arlen Parker	Raleigh
*Charles Heyward Riedell	Rome, GA
David Anthony Scarlata	Elon College
Kevin DeMarcus Simpson	Indian Trail

Degrees Conferred December 16, 1986

Roger Daniel Adams	Raleigh
Hayssam Mohamed Alsous	Beirut, Lebanon
William Alton Ball	Whiteville
***Sheila Marie Benfield Banks	Asheville
*Daniel Franklin Bare	Jefferson
*Clifton Gene Barfield	Raleigh
Lonnie Ray Barrier	Salisbury
**Todd Alan Beine	Wilmington
*Jeffrey Edward Berthold	Greensboro
**Geoffrey Robert Bishel	Huntington, WV
Catherine Elizabeth Brady	Greensboro
Acie Brooks Brown	Tarboro
George Carlton Brown	Yanceyville
David William Bryant	Kinston
Seungchul Choi	Winston-Salem
Kellie Hyon-Ok Chong	Greensboro
**Michael Charles Clapp	Fayetteville
*John Braxton Coggins	Raleigh
*Kenneth Raymond Coulter II	Durham
Ronald Douglas Critelli, Jr.	Fishkill, NY
*Frank Brian Croft	Wilmington
Christopher Keith Denny	Winston-Salem
Thao Van Dinh	Charlotte
Joseph Ross Ellis	Raleigh
Michael Robert Evans	Raleigh
*Laura Jean Falter	Apex
†***Richard William Farrington	Guatemala, Guatemala
*David Manning Fellowes	Elizabeth City
James Taylor Fryar	Rocky Mount
Joseph Anthony Gallagher	Chapel Hill
***John Joseph Gatto	Cary
Karen Lynn Giesbrecht	Cary
**Walter Ernest Gordon	York, ME
†Gail Lisa Gowdy	Wilmington
**Charles Harrell Gunn	Atlanta, GA
Douglas Brian Guthrie	Raleigh
*James Frederick Hamilton	Greenville
Dixie Denise Harrison	Durham
**Anthony Ray Hefner	Hickory
Richard Ernest Hicks	Raleigh
Andrew Hwang	Chapel Hill
Scott Bosworth Johnson	Arlington, VA
*Paul Reginald Jordan III	Raleigh
David Patrick Kenny	Apex
Joseph Alan Key	Rocky Mount
David Anthony Kondas	Bridgewater, NJ
Jennifer Lynn Kuehn	Raleigh
Malcolm Keith Lanier, Jr.	Asheboro

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

James Gillespie Latham	Raleigh
**Mark Arrington Law	Raleigh
Gayle Marie Legler	Monroe
*Joel Alan Long	Marshville
Timothy Dwight Marsh	Sanford
Jason Daniel Martin	Greensboro
*Colleen Ann McCarthy	Niagara Falls, NY
Thomas Joseph McHugh	Chardon, OH
*William Joseph Mersch	Cary
*Mark Robert Meyer	Binghamton, NY
**Roderick Mason Miller	Charlotte
Patrick Mark Milner	Lithia Springs, GA
*Bernard Armand Morin	Colchester, VT
Huy Xuan Ngo	Gaithersburg, MD
Quang Ly Nguyen	Fayetteville
Thunga Thi Nguyen	Raleigh
Katie Howard Nixon	Raleigh
Terrence Howard O'Connell	Gaithersburg, MD
Caron Lee Owen	Boone
David Carlton Painter	Charlotte
Ketan Sharad Patel	Clifton, NJ
Nitin Haribhai Patel	Roanoke Rapids
Mark Alan Peterson	Jacksonville
Lisa Anne Pettyjohn	Poughkeepsie, NY
**Daniel Bryan Phillips	Raleigh
Robert Charles Richards	Hickory
Jerry Hascue Robinson III	Asheville
Mary Lillian Rutchka	Charlotte
Susan Lynia Setzer	Sparta
James Mark Shaw	Lillington
Gwendolyn Marie Sheppard	Willingboro, NJ
Charles Edward Simmons	Lenoir
*Gurvinder Singh	Raleigh
†***Rajendra Prasad Singh	Carrboro
**Scott Traynham Stillman	South Boston, VA
Danny Stone	Raleigh
**Daniel James Swart	Raleigh
**Dennis William Taylor	Raleigh
Scott Alan Thabet	Greensboro
Basem Kamal Toma	Cary
***Kevin Vincent Tracy	Raleigh
Francis John Trainor	Raleigh
Alan Wayne Trollinger	Greensboro
Carlos Manuel Vasquez-Segura	La Ceiba, Honduras
†***Simon Verghese	Cary
**Mitchell Virchick	Matawan, NJ
Carl Lee Wilkins	Rocky Mount
***Joel Mark Yarborough	Winston-Salem
Inaki Mirena Zubizarreta	San Sebastian, Guipuzcoa, Spain

Degrees Conferred May 9, 1987

Tony Ray Adcock	Monroe
David Anthony Alexander	Warrenton
James Franklin Allen	Bladenboro
*Hassan Ashraf Allouba	Raleigh
**John Scott Aman	Garner
**James Roy Ayscue	Henderson
***Steven John Bachouros	Raleigh

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

Timothy Patrick Beyrle	Atlantic Beach, FL
***Richard James Bishop	Matthews
John Paul Bodford	Clemmons
Matthew John Bothe	Sanford
Reginald Todd Boyce	Hertford
*Michael Glenn Boyd	Fort Mill, SC
Lisa Dawn Brandon	Lewisville
Michael Franklin Brown	Durham
Michael Lambert Brown	Greenville
†**Kelly Reid Bryant	Kernersville
**Kevin Michael Calloway	China Grove
Cornell Lorin Chandler	Charlotte
Orbie Scott Chandler	Raleigh
Barry Carlton Colclough	Durham
***Todd Alan Cook	Huntsville, AL
*Eugene Scott Crist	Fredericksburg, VA
Douglas Allen Cundiff	Fayetteville
Louis Holt Davis	Wilmington
*Richard Franklin Davis	Baltimore, MD
**Michael Elliott Dermott	Durham
Robert Lee Diepenbrock, Jr.	Raleigh
Carmen Elizabeth Dietrich	Lumberton
Dominic Dirisio	Greenville
David John DiSerafino	Wayne, PA
Douglass Mark Durrett	Henderson
Kenneth Michael Eaton	Raleigh
Michael Dean Ellis	Charlotte
Mark Anthony Elrod	Smithfield
Richard Winston Eskridge	Winston-Salem
Stephen Daniel Farthing	Danville, VA
Joseph Wayne Forbes, Jr.	Star
Sherman Bruce Gibbons	Raleigh
†***Gerald Warren Gibson, Jr.	Durham
**Mark Francis Gill	Chapel Hill
Brian Dale Gottfried	Hope Mills
Tony Alan Grantham	Goldsboro
Timothy Robert Green	Newport News, VA
**William Byron Grizzle	Winston-Salem
Daniel Thomas Grundman	Boone
Antonio Gutierrez	Oxnard, CA
*Rebecca Ann Haithcock	Burlington
Franklin Harvey Hart	Wake Forest
***Gerard James Hayes	Upper Montclair, NJ
**David William Heglar	Kure Beach
Oakley Lamonte Hopkins III	Currie
Tanya Denise Horton	Sanford
†Lucas Kuang-Che Huang	Raleigh
Dale Augustus Jones	Whiteville
Royal Curtis Jones, Jr.	Thomasville
**Jay Anthony Joyner	Tarboro
*Joanne Frances Kaiser	Chapel Hill
*Todd Gregory Kallam	Mayodan
**Thomas Michael Keane	Old Bridge, NJ
Dennis Michael Kearney	Wilmington
**Gary Robert Kern	Albion, NY
Joo Ho Kim	Fayetteville
*Charles Joseph Knes-Maxwell	Chapel Hill

†Co-major

* Cum Laude

** Magna Cum Laude

*** Summa Cum Laude

H Honors Program

**Thomas Richardson Lenny	Lake Wales, FL
Ty Robert Leonard	Mascoutah, IL
**John Samuel Liberty	Raleigh
*Terry Lee Lively	Cary
*Mark Benedict Lokke	Cary
John Allan Long III	Indian Trail
Vincent Paul Luciani	West Patterson, NJ
Richard Brooks Mabry	Green Creek
Arthur Ray Macey	Stokesdale
Cecil Wray Martin, Jr.	Greensboro
Jesse Worth Martin	Raleigh
John Charles Mason	Raleigh
Timothy Charles Massey	Goldsboro
Alasdair Ernest McGregor	Raleigh
Robert Clayton Murphy	Raleigh
Hoang Xuan Ngo	Gaithersburg, MD
*William Charles Nussey	Raleigh
Wren Marie O'Connor	Miami, FL
***Jon Karnett Olson	Lenoir
*Ellen Adair Page	Raleigh
***Janice Maxine Parker	Monroe
Debra Lynn Peacock	Winston-Salem
William Joseph Phifer	Matthews
Jack Harvey Plyler, Jr.	Indian Trail
Lawrence Russell Porter	Denville, NJ
†William Theodore Rankin	Greensboro
Charles Gary Ray	Asheville
Gary Wayne Ray	Red Springs
Scott Alan Reynolds	Shelby
*Dewey Samuel Roberts II	Sanford
***Joseph Todd Rouse	Greenville
*Tarek Ahmad Saadi	Amman, Jordan
**William David Sartor	Newtown, CT
***Gregory David Senter	Garner
***Uzma Rehana Siddiqi	Raleigh
*William Richard Sieredzki	Greensboro
Stephen Carr Skinner	Virginia Beach, VA
Michael Alan Smith	Lumberton
Stephen Attila Soltesz	Greensboro
*Samuel Hinsdale MacPherson Spilman	Fayetteville
Paul Michael Stanfield	Greensboro
*Douglas Roscoe Stocks	Raleigh
*William Thomas Strayhorn	Durham
Steffen Andreas Teichmann	Matthews
James Dedric Terry	Winston-Salem
**David Walter Thomas	Cove City
†**Michael Kelley Tippet	Raleigh
*Stephanie Vallas	Fuquay-Varina
Scott Daniel Walters	Fairborn, OH
Charles Thomas Weaver	Creedmoor
***Doyle Allen White	Chumuckla, FL
*John Patrick Whitfield	Cary
William Bruce Wike, Jr.	Cullowhee
†*Wesley Scott Wilburn	Apex
Frank Wooten Williamson	Chadbourn
Thomas Clay Williamson, Jr.	Wilkesboro
Steven Aaron Wright	Matthews

***Stanford Louis Yates	Raleigh
Steven Seymour Yauch	Raleigh
Jeffrey Gene York	Charlotte
**Janet Lynn Youngblood	Clifton Park, NY
Timothy Sanford Zeller	Mebane
Avraham Shlomoh Ziv	Raleigh

BACHELOR OF SCIENCE IN ENGINEERING OPERATIONS

Degrees Conferred June 25, 1986

Christine Ann Longaker	High Point
Debra Ann Twiss	Snow Hill

Degrees Conferred December 16, 1986

Richard Daryle Jarman	Angier
Ed Rae Rogers	Rockingham

Degrees Conferred May 9, 1987

Edward Allen Conroy	Raleigh
Kenneth Houston Drum	El Paso, TX

BACHELOR OF SCIENCE IN FURNITURE MANUFACTURING AND MANAGEMENT

Degree Conferred August 7, 1986

Leonard Statham Gilliam III	Statesville
-----------------------------------	-------------

Degrees Conferred December 16, 1986

Robert Edwin Freeland	Raleigh
Monique Renata Head	Decatur, GA
*John Ann Phei Ng	Singapore, Singapore
Brian Christopher Tanner	Greensboro
Philip Filer Wright	Raleigh

Degrees Conferred May 9, 1987

*Charles Scott Abernethy	Maiden
Archie Elwood Austin, Jr.	Morehead City
Todd Allison Ferrell	Winston-Salem
*Stacey Zane Graves	Burlington
Mark Edwin Smith	Greensboro
Mark Edwin Talbert	Trinity

BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING

Degrees Conferred June 25, 1986

**William Samuel Allen	Star
Donna Jean Butler	Clinton
Farnham Wheeler Caney III	Wilmington
Iris Lil Godette	New Bern
Patrick John Kelly	Goldsboro
Richard Franklin Lineberger	Raleigh
*Cynthia Marlene Martin	Taylorsville

Degrees Conferred August 7, 1986

George Charles Grigg	Raleigh
Reza Hoomani	Tehran, Iran

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

Douglas Gregory Jackson	Fayetteville
John Brian Leick	Sheboygan, WI
Marc Edwin Sasser	Greenville
Elizabeth Ann Weeks	Wilmington

Degrees Conferred December 16, 1986

David Bryan Adams	Columbia, SC
Wendy Adler	Raleigh
Norman Benesch	Raleigh
Jo Anne Britt	Lumberton
David Raymond Camp	Cary
**Franklin Watts Chafee	Kernersville
Susan Elaine Copley	Durham
Andrew Lindsay Dilley	Valle Crucis
David Howard Eckstein	Winston-Salem
Lori Renae Finch	Wilson
Melinda Kaye Grissom	Durham
*James William Hammond III	Columbia, SC
Kelly George Hollodick	Cary
Carolyn Virginia Huettel	Pfafftown
Carolyn Ann Jenkins	Leland
Frederick Anthony Jenkins	Bunnlevel
Kimi Eugenia Jones	Wilson
Alan Edward Kafitz	Belmont
Susan Beth Lashock	Raleigh
Eloise Albright McLean	Lake Waccamaw
Timothy Michael McMahon	Kinston
***Albert Haywood Page II	Burgaw
David Lewis Paschall	Drewry
Jill Routh Reich	Winston-Salem
Lawrence Steven Rominger	Winston-Salem
Linda Marie Roseboro	Charlotte
**Donna Maria Scheltinga	Raleigh
Michael James Scott	Rockville, MD
Albert Louis Singleton	Greenville
Jeffery Chris Stark	Aurora
Larry Carlton Talbert, Jr.	Greenville
Lynda Ruth Thomas	Pittsboro
Ronald Everette Weathers, Jr.	Mars Hill
Donald Ray White	China Grove

Degrees Conferred May 9, 1987

*James Gregory Boone	High Point
Karen Margaret Brose	Guatemala, Guatemala
Michael Romeo Burton	Clinton
Angela Denise Charles	Winston-Salem
Robert Thompson Crew	Raleigh
John Robert Drake	Fair-Haven, NJ
Bradley Evan Dunn	Saint Simons Island, GA
Donald Dwight Eason, Jr.	Newport News, VA
Greta Jane Ferguson	Lenoir
Thomas Anthony Gore	Jefferson
*Jana Carol Grindstaff	Columbia, SC
Wendell Dwayne Hardnett	Fayetteville
Alberta Jeanette Hawes	Cary
Neal Aaron Henderson	Statesville
*Rika Hinson	Charlotte

†Co-major

* Cum Laude

** Magna Cum Laude

*** Summa Cum Laude

H Honors Program

Dwight Eugene Hodge	Graham
Bruce Melvin Honeycutt, Jr.	Aberdeen
*Dana Anne House	Pinetops
Kevin John Hume	Raleigh
Marcus Lee Ingram	King
*Jerry McDonald Jackson	Raleigh
Kristina Elena Jasaitis	Fayetteville
Cheryl Lynn Kapella	Raleigh
Lucinda Lee Leggett	Washington
**Sandra Christine McCall	Hendersonville
Demetrius Lee McDowell	Hope Mills
Angela Sue Meeks	Fayetteville
Bonnie Susan Metzger	Jonesville
Naomi Annette Murrell	Pollocksville
Thomas Elderkin Nesbitt	Short Hills, NJ
*Cheryl Maureen Parris	Charlotte
Charles Thomas Pike	New Bern
**Maria John Pribas	Charlotte
*Leslie Lee Runion	Alden, NY
Donna Marie Sills	Lenoir
Anthony Lee Smith	Roseboro
Alvin Sumter	Hopkins, SC
Nancy Susan Taylor	Fredon, NJ
Henry Jackson Thiel III	Burlington
Elizabeth Ann Thomas	Raleigh
**Tyrus Hugh Thompson	Raleigh
Stephanie Elizabeth Tyson	Raleigh
Yolanda Denise Ward	Wilson
Charles Daniel Watts, Jr.	Charlotte
Anne Marie Wenzel	Raleigh
*Cynthia Jones Wertz	Cary
Lisa Ann Williams	Baltimore, MD
Jeffrey Keith Windland	Friendship, MD

BACHELOR OF SCIENCE IN MATERIALS SCIENCE AND ENGINEERING

Degree Conferred June 25, 1986

Carlton Cobb Oakley	Farmville
---------------------------	-----------

Degrees Conferred December 16, 1986

Neil Edwin Jarman	Maury
Ken Preston Murray	Wilson
*Mark Ashley Short	Raleigh

Degrees Conferred May 9, 1987

***John Peter Bade, Jr.	Hopewell Junction, NY
William Malen Blair, Jr.	Sanford
Thu-huong Thi Dinh	Charlotte
Mark David Fisher	Raleigh
John Douglas Herman	Hickory
James Timothy Kelliher	Somerville, MA
Danelle Pringle McDonald	Durham
Eric Scott Painter	Maiden
Alan Todd Parsons	Hickory
Raymond Eugene Parsons	Maysville

+Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

Jeremy Bentham Petit	Greensboro
Solomon Otis Ricks	Greensboro
H. Merrick Teichman	Greensboro
Tania Sue Williams	Durham
John Thomas Wilson	Charlotte

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Degrees Conferred June 25, 1986

Jesse Gray Camp III	Charlotte
Kevin Michael Coyle	Greenville
Anthony Michael Ferrante	Kinston
Walter Todd Green	High Point
**James Edwin Ivey	Erwin
James Steven Moore	Maxton
John William Price	Gastonia

Degrees Conferred August 7, 1986

Randolph Gordon Paul	Wilmington
Russell Hunt Rollins	Winston-Salem
***Brenda Lee Wesp	Havelock

Degrees Conferred December 16, 1986

James Bradley Abernathy	Chapel Hill
Nancy Jane Beck	Wilmington
Langdon Stanford Bennett	Boone
Devin Daniel Biehler	Newton
Gregory George Bishop	Pocomoke, MD
Billy Joe Blakely, Jr.	Lexington
David Scott Boyer	Rural Hall
Michael Richard Brennan	Colonia, NJ
Loyd Franklin Broom, Jr.	Indian Trail
John Franklin Bryerton, Jr.	Syracuse, NY
Michael Lee Bullins	Walnut Cove
John Albert Burgess, Jr.	Burlington
Willis Layne Burroughs	Whiteville
Beth Angela Burton	Winston-Salem
*Ivan Daryl Chapman	Murphy
*Lawrence Wicker Clayton	Raleigh
Timothy Michael Delaney	Falmouth, KY
*William Ray Doggett	Cary
William Chris Eaton	Advance
***Robert Clint Elrod	Clemson, SC
Christopher Larry Farabee	High Point
†***Richard William Farrington	Guatemala, Guatemala
Robert Mantell Fisher	Lumberton
Jerry Dean Gallimore	Thomasville
Robert Van Cleve Giersch	Raleigh
Michael Eugene Grice	Goldsboro
Ritchie Kay Griffin	Sanford
**David Allen Grigg	Charlotte
John Prentice Hall	Apex
Thomas Coble Hardin	Danville, VA
Marsha Dale Hartz	Charlotte
Alan Kent Hicks	Mount Airy
Darrell Dwayne Hicks	Staley

†Co-major

* Cum Laude

** Magna Cum Laude

*** Summa Cum Laude

H Honors Program

Terence Patrick Hogan	Burlington
Kevin Finley Johnson	Mars Hill
Oaker Bernard Jones	Fuquay-Varina
Thomas Russell Jones	Raleigh
Randal Wayne Kerr	Huntersville
Woo Jung Kim	Clinton, MD
Stephen Paul Kinney	Chambersburg, PA
**Raymond John Klimas	Chapel Hill
Gregory Alan Leach	High Point
Joe William Lee, Jr.	Harrisburg
Jonathan Albert McGee	Greenville
James Work Moore	Wendell
Edward Tyrrell Morrison	Indianapolis, IN
Phillip Randolph Myers	Granite Falls
Mark Andrew Ostermann	Raleigh
William Ray Perry	Arden
Jonathan Allen Pritchard	Charlotte
Robert Wyatt Rector	Rutherford College
Fredrick William Ripper	Murphy
Joseph Kyle Roberts	Kailua, HI
Michael Edward Robinette	Fallston, MD
***Gregory George Schott	Charlotte
Nicolas Charles Sear	Lewisville
Stephen Frank Serwin	Charlotte
Kimberly Michelle Sink	Winston-Salem
Noel Cameron Sipe	Hickory
Drexel Kermit Smith, Jr.	Kinston
Kathleen Marie Smith	Raleigh
Newton Alexander Smith III	Davidson
Vonnie Bryan Smith, Jr.	Raleigh
Martha Elizabeth Stebbins	Raleigh
Lee Thompson Stewart	Maxton
*Clifton Daniel Stiles	Greensboro
James Michael Turner	Reidsville
Carl Owen Utterback	Cary
***Michael Henry Van Haaren	Pennington, NJ
Robert Livingston Vance, Jr.	Greensboro
Tammy Patterson Vanhoy	Cary
**James Edward Walker, Jr.	Fayetteville
*Nelson Edward Walker	Morganton
William Thomas Willis	Raleigh
Hugh Charles Young	Waynesville

Degrees Conferred May 9, 1987

Elizabeth Erwin Allen	Hendersonville
Gordon Michael Alston	Roanoke Rapids
**Brian Kirk Anderson	Denver
**Elton Russell Ange III	Cary
David Eugene Baker	Asheboro
Clifton Wade Baldwin	John's Island, SC
Sharon Denise Becker	Saint Pauls
Alex William Beltzhoover	Joilet, IL
Paul Martin Blankenship	Richmond, VA
John Palmer Brooks	Cary
Cecil Bennett Brown, Jr.	Raleigh
Kent Blair Brown	Raleigh
**Brian Chester Bullock	Wendell

†Co-major

* Cum Laude

** Magna Cum Laude

*** Summa Cum Laude

H Honors Program

Norwood Stanley Carter, Jr.	Ingold
Scott Edward Chesla	Jacksonville
Gregory Norman Choplin	Raleigh
Columbus Clark Cockerham, Jr.	Raleigh
Camille Marie Cole	Aberdeen
Steven Ray Coley	Thomasville
***Robert Irving Connelly	Charleston, WV
***Mark William Corbett	Monrovia, MD
Thomas Jess Costa	Waynesville
Robert Lee Cousar, Jr.	Charlotte
Dewey Lynn Covington	Mebane
Nora Hammett Cowart	Salisbury
**Norman Samodio Cruz	Lincolnton
*Kenneth George Curtis III	Raleigh
Timothy Edward Daly	Alexandria, VA
Martin Ray Deal	Statesville
John Harrell DeVore	Matthews
Lisa Ann Dyson	Mocksville
Kimberly Kay East	Kernersville
Robert Michael Elliott	TGappahannock, VA
***John Robert Emerson	Cary
Justin Alan Evans	Cary
***Karl Joseph Falter	Apex
Eddie Scott Flinchum	Greensboro
Arthur Eugene Gantt, Jr.	New London
*Michael Damon Gialenios	Charlotte
Paul Keith Gray	Charlotte
David Lincoln Hall	Asheville
Jerald William Hall	Raleigh
Samuel Joseph Hamrick	Boiling Springs
Robin Hill Hankins	Wrightsville Beach
Lori Ann Hardin	Huntersville
*Patricia Diane Henderson	Charlotte
Janice Amie Higgins	Rutherfordton
Simon John Hitchcock	Charlotte
Robert Lewis Holberg, Jr.	Rocky Mount
Stephen Erick Holland	Schenectady, NY
Timothy Patrick Howard	Raleigh
Terence Howard James	Durham
*Gregory Alan Johnson	Cary
*Mitchell Eric Johnson	Siler City
Robert Wayne Jones	Pembroke
*Christopher Scott Keeley	Brevard
*Stephen Arnold Kennedy	Hillsborough
Patrick Ray Kirkland	Rocky Mount
Mark Leonard Lail	Connelly Springs
Gregg Alan Lentz	Kannapolis
Franklin Patrick Lewis, Jr.	Kelford
Mary Ellen Lewis	Todd
*Randolph Edward Link	Mocksville
Lisa Karen Long	Wilmington
*Leonard Anthony Lowinski	Media, PA
***Phillip Jay Lukowicz	Rice Lake, WI
***Scott Stanley Lund	Greensboro
***Kenneth Lynch	Wilmington
Jeffrey Wayne Maness	Roanoke Rapids
**Charles Arnold Monroe, Jr.	Fayetteville

Ted Lee Munday	Patterson
Donald Devereaux Munn	Raleigh
Rochelle Donnae Muse	Richmond, VA
Scott Bennett Nalven	Devon, PA
Clyde Struthers Newell	Asheville
*Wesley Benton Owen	Winston-Salem
Robert Lee Parks	Raleigh
Donald Sutton Patterson, Jr.	Chapel Hill
Douglas Kent Patterson	China Grove
**John David Patterson	Charlotte
James Benham Patton	Baltimore, MD
John Martin Patton	Winston-Salem
Randy Lynn Pearson	Moravian Falls
Wilhelmina Jeffries Pierce	Mebane
*John Wesley Plenge	Greenville
*John Edwin Pollard	Fayetteville
*Daniel Thad Potts, Jr.	Roanoke Rapids
Keith Quistorff	Raleigh
Scott Donald Ratliff	Wilmington
*Jay Holloman Renfrow	Kenly
Ronald Joseph Ricci	Baltimore, MD
Charles William Roach	Chapel Hill
Scott Edward Rosch	Durham
*Gregory Wayne Royal	Mebane
Robert Carlton Ruffin	Tarboro
Gary David Rumbaugh	Orange, CA
Gavin Blake Rumble	Raleigh
***Joseph Michael Seaton	Chapel Hill
William King Shore	Greensboro
†Frank Jackson Small	Archdale
Claude Wayne Smith	Gibsonville
*John Christopher Speight	Kernersville
Nelson Clark Stephens, Jr.	Valdese
Phillip Nauta Strayer	Apex
Bryan Sheldon Sturgies	Charlotte
Joseph Patrick Tilley	Walnut Cove
Edward Barnard Trigg	Richmond, VA
**Michelle Howe Vorhees	Elmore, OH
*Thomas Alan Walter	Winter Springs, FL
***Christopher Lane Warren	Roanoke Rapids
Michael Andrew Wassell	Charlotte
Julie Ann Weigele	Clayton
***Michael Edward West	Pineville
George Kurt Wharton	Asheville
*Tammy Lou Wike	Taylorsville
Christopher Kenneth Winterrowd ..	Greensboro
James Albert Witherspoon	Charlotte
James Blythe Wolfe	Charlotte
Colin James Wright	Raleigh
Brian Yogodzinski	Fayetteville

BACHELOR OF SCIENCE IN NUCLEAR ENGINEERING

Degrees Conferred August 7, 1986

Thomas Humphrey Prettyman	Wilmington, DE
Laura Beth Rounds	Charlotte

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

Degrees Conferred December 16, 1986

*James Scott Bowman	Durham
*Peter Joseph Marsico	Cary
Brian Wilfred McCray	Spartanburg, SC

Degrees Conferred May 9, 1987

*Samuel Craig Ballard	Denver
**Joseph Craig Bigham	Charlotte
Steven David Foster	Lincolnton
**Ralph Gregory Helms	Harrisburg
Steven Bradford Lamoureux	Taylors, SC
**Rajesh Maingi	Raleigh
Scott Wilson Moser	Kannapolis
*David Arthur Nix	Rutherfordton
Thomas Daniel Ray	Fort Bragg
William Mark Runion	Wilmington
Guy Thomas Wiggins	Asheville

School of Forest Resources



BACHELOR OF SCIENCE IN CONSERVATION

Jointly administered by the School of Forest Resources and the School of Agriculture and Life Sciences.

Degree Conferred August 7, 1986

Terry Mason Herndon	Bunnlevel
---------------------------	-----------

Degree Conferred December 16, 1986

**John Christopher Koechley	Brooklyn, NY
-----------------------------------	--------------

Degree Conferred May 9, 1987

Robert Darrell Harding	Rockingham
------------------------------	------------

BACHELOR OF SCIENCE IN FORESTRY

Degrees Conferred August 7, 1986

David Marcus Eckerd	Shelby
Barry Todd Ellenburg	Rutherfordton
John Gregory Franklin	Sylva
Jeffery Mark Smith	Lincolnton
Nigel Jefferson Weekes	Saint Vincent, WI

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

Degrees Conferred December 16, 1986

Rod Michael Krutulis	Murphy
Lewis Cowper Lawrence, Jr.	Sanford
Jose Luis Romero	Cali, Colombia
William James Stayton	Greensboro

Degrees Conferred May 9, 1987

***Samuel Clark Beavans, Jr.	Enfield
Herman Robert Berkhoff	Raleigh
**Jody Thomas Brady	Trinity
Daniel Ray Brandon, Jr.	Gastonia
William Andrew Casey	North Wilkesboro
Warren Francis Cummings	Charlotte
***Dennis Scott Detar	Concord
*David Ray Gladden	Sanford
Thomas Andrew Harraghy	Cary
David Allen Markowski	Havelock
Timothy Jay McCracken	Siler City
Deborah Lynne Murosky	Raleigh
William Ryan Nethery	New Orleans, LA
Felicia Gail Roland	Aurora
Timothy William Tabak	Stratford, CT

BACHELOR OF SCIENCE IN PULP AND PAPER SCIENCE AND TECHNOLOGY

Degree Conferred June 25, 1986

James Richard Hardee	New Bern
----------------------------	----------

Degrees Conferred December 16, 1986

†***James Hawkins Caudill	Clemmons
Carl William Greenway	Augusta, GA
†*James Allen Krozser	Raleigh
†Roger William Nussman	Matthews
†Gary Franklin Sharpe	Whiteville
Beverly Jean Taylor	Beaufort
Dana Lynn Wintzer	Raleigh

Degrees Conferred May 9, 1987

David Byron Hall	Lake Waccamaw
Jack Arnold Hammond II	Covington, VA
†**Mark Steven Keller	Seven Valleys, PA
Clyde Wilburn Lollis, Jr.	West Point, VA
Kenneth James Meiers	Asheboro
Laurie Lynn Schilling	Lynn Haven, FL
George Alan Sumrell	Grifton
Patrick Michael Watkins	Castle Hayne
**Alan James Watters	Chesterfield, VA

BACHELOR OF SCIENCE IN RECREATION RESOURCES ADMINISTRATION

Degree Conferred June 25, 1986

Alissa Good	Roselle Park, NJ
-------------------	------------------

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

Degrees Conferred August 7, 1986

Paulette Anne Irvin	Frederick, MD
**Martha Anne Miller	Monroe

Degrees Conferred December 16, 1986

Cynthia Marie Evans	Troy, MI
Dianna Marie Ganote	Matthews
Robert Douglas Maners	New Bern
Hugh Alexander McLean	Raleigh
Donald Dean Starling	Cherryville
Christopher Warren Ward	Tabor City
Steve William White	Forest City
Nathaniel Olmstead Whitlaw III	Jacksonville
Nathan Mack Woodlief, Jr.	Garner

Degrees Conferred May 9, 1987

Mitchell Ray Driver	Rocky Mount
Mark Alan Flaughner	Chapel Hill
Janie Herndon	Tabb, VA
Mark Wayne Holley	Spring Hope
Lee Edward Howell	Rocky Mount
Donald Dwayne Jones	Moss Hill
Susan Lynne Jones	Raleigh
Angela Klisiewicz	Benson
Kieran Michael O'Malley	Pittsburgh, PA
Sarah Pomeranz	Sanford
Teresa Michelle Stroupe	Raleigh
John Neil Thompson	Asheville

BACHELOR OF SCIENCE IN WOOD SCIENCE AND TECHNOLOGY

Degree Conferred June 25, 1986

Othman Sulaiman	Selangor, Malaysia
-----------------------	--------------------

Degrees Conferred August 7, 1986

Scott Charles Allen	West Millington, NJ
Rokiah Hashim	Johore, Malaysia

Degrees Conferred December 16, 1986

James London Brinkley	Covington, VA
*Ming-Chih Chao	Taiwan, Republic of China
William Ronnie Hales, Jr.	Halifax

Degrees Conferred May 9, 1987

Glenn Albert Baker	Wilmington
Pierre Bluteau	Wickham, Quebec, Canada
William Roy Cloninger	Bessemer City
David Craig Evans	Wallace
Robert Wilson Fitzgerald	Pine Level
Serge Omer Fortin	Acton Vale, Quebec, Canada
Bruce Alan Hafley	Raleigh
Harold Edward Lowe	Thomasville

Jeffrey Todd Provo	New Bern
†Todd Aaron Reasor	Houston, TX
George Thomas Vann, Jr.	Conway

School of Humanities and Social Sciences



BACHELOR OF ARTS IN ACCOUNTING

Degrees Conferred June 25, 1986

James Leon Browning	Durham
***Nancy Davidson Gill	Raleigh
Marty Scott Hanes	Lexington
Beverly Ann Haney	Star
Patricia Ann Hilliard	Enfield
Monica Susan Hornburg	Jackson, MI
Sherif Youssef Iskander	Sanford
***Bruce Philip Karlen	Chicago, IL
Sonia Marie Self	Fayetteville
David Giles Sheffield	Raleigh
Brenda Jean Tate	Fayetteville
Princess Gaytina Watson	Winston-Salem
*Mary Louise Williams	Thomasville
†Robert Nolan Williard	Winston-Salem

Degrees Conferred August 7, 1986

Donald Keith Branch	Smithfield
†**Jenifer Lynn Girouard	Fayetteville
William Richard Gupton	Rocky Mount
Laura Susan Laws	Roanoke Rapids
Susan Jan Loy	Burlington
Lisa Marie Rohman	Cary
**Roy Albert Rumbough, Jr.	Fayetteville
†Amy Suzanne Stanley	Greensboro
Thomas Eugene Waldrop, Jr.	Raleigh
Dwanda Jean Weathers	Burlington

Degrees Conferred December 16, 1986

Pamela Jean Baker	Murfreesboro
Marc Edward Brady	Charlotte
Marjorie Horton Cox	Raleigh

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

†Robert Gerard DeVol	Washington, DC
†Patricia Dianne Dickens	Raleigh
Michael Evan Doernberg	Winston-Salem
Rita Mary Donaldson	Raleigh
Christopher Bryan Edwards	Carpenter
Andrew Joseph Fava	Baltimore, MD
Ray Loraine Forrest	Cary
Conrad Alan Goree	Durham
*Kathleen Ann Greeson	Raleigh
†Kimberly Michael Hocutt	Gastonia
Roberta Ann Hood	Raleigh
*Melodie Anne Hopkins	Knightdale
†John Linzie Hoskins	Saratoga
Jennifer Lynn Jones	Raleigh
*Brian Christopher Jordan	Roanoke Rapids
*Caroline Alice King	Raleigh
Brenda Lynn Knott	Knightdale
Mary Ellen Lally	Raleigh
Thomas James Lally	Raleigh
Valerie Marie Marsh	Cary
Karen Ann McKay	Raleigh
Marsha Ann McLean	Durham
Patti Lynn McPherson	Charlotte
†Bertha Alicia Pierce	Clayton
†James Gary Pittman	Raleigh
Roy Wayne Reter	Lewisville
*Karen Lynn Rzasa	Cary
†Kelly Anne Sanders	Asheboro
**Olivia Ann Taylor	Richlands
†John Madison Thomas III	Morganton
†Janice Lynn Toothaker	Fayetteville
Sandra Faye Upchurch	Apex
*James Floyd Watkins, Jr.	Spring Lake
Lloyd Thomas Wood III	Rutherfordton

Degrees Conferred May 9, 1987

John Samuel Agnew	Raleigh
Mia Denise Allen	Monroe
Amy Lynn Anderson	Charlotte
***Luise Kutsch Barnes	Apex
Thomas DePoyer Barritt	Kitty Hawk
Kim Renée Battle	Amityville, NY
***Lori Ann Benfield	Lincolnton
***Beth Ann Benyas	Raleigh
Karen Christel Birk	Greensboro
Lori Jean Blanton	Durham
Patricia Ann Blehi	Clayton
Nathaniel Kevin Brown	Charlotte
Teresa Lynn Brown	Saint Pauls
†***Karen Allen Burkhead	Asheboro
Cynthia Lynn Clark	Columbia, SC
*Tammy Lynne Cordell	Henderson
**Jeffrey Scott Crissman	Bear Creek
John Thomas Cuomo	Kinston
Andrew Benson Curl, Jr.	Durham

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

*Patricia Joyce Ellington	Charlotte
*Karen Elizabeth Emery	Raleigh
†*Steven Lee Gilleland	Charlotte
Camilla Rosann Harrison	Snow Hill
Amy Katherine Haskins	Creedmoor
Thomas Todd Hennis	Mount Airy
†Tammy Jo House	Raleigh
†Deborah Ann Hyder	Rutherfordton
***Louis Anthony Iannone	Raleigh
Curt Mitchell Intro	Raleigh
Kristi Jan Jones	Kernersville
Emric James Jorgensen	Raleigh
Russell Mark Kimbrell	Raleigh
**Gregory Jerome Kinlaw	Lumberton
Steven Thomas Lane	Centereach, NY
John Henry Liverman	Woodland
*Philip Alan Loseke	Raleigh
Cynthia Alene Medlin	Durham
**Paula Barber Melton	Henderson
Jeffrey Allen Miller	Raleigh
*Susan Elizabeth Miller	Sunset Beach
*Denise Burks Mitchell	North Wilkesboro
Beverly Ann Moore	Apex
†Kristi Michelle Murray	Winston-Salem
Timothy Moran Parker	Pine Level
†Laura Anne Patton	Roanoke Rapids
Stephanie Susan Payne	Wilkesboro
†Donald Ray Peebles, Jr.	Raleigh
†Jeffrey Ryan Porter	Greenville
John Hamilton Price	Raleigh
†Mark Conrad Rodriguez	Rockville, MD
Teresa Susan Sanford	Kinston
†Libby Cruz SanNicholas	Spring Lake
***Dawn Renee Schambach	Colorado Springs, CO
**Barbara Whitney Settle	Sanford
Gerald David Smith	Cary
Paul Charles Spanos	Winston-Salem
Sara Hart Stafford	Kernersville
Tina Renee Steele	Mount Gilead
**Joseph Gerard Stephan	Reisterstown, MD
Martha Elaine Stevenson	Statesville
Janet Elaine Stone	Stony Point
Richard Brian Temple	Fayetteville
Mana Leslie Tester	High Point
*Margaret Jill Thomas	Moncure
John Daniel Thornton	Garner
†**Charles Stafford Umberger	Winston-Salem
Tammy Jane Wahab	Cary
**Mark Joseph Wahl	Raleigh
Betty Lynette Webber	LaGrange
Tamero Black Wiles	Raleigh
Dawn Marie Wilson	Raleigh

†Co-major

*Cum Laude

**Magna Cum Laude

***Summa Cum Laude

H Honors Program

BACHELOR OF ARTS IN BUSINESS MANAGEMENT

Degrees Conferred June 25, 1986

Lori Robin Austin	Wadesboro
Thomas Andrew Bowker	Raleigh
†Ray Teague Canoy	Durham
Elizabeth Lucille Cashwell	Prairie Village, KS
†Daniel Thomas Crawford	Raleigh
Carol Whitley Dean	Knightdale
*Craig Franklin Dean	Raleigh
†Matthew Jean DesVergers	Whiteville
William Mason Farrell	Santa Barbara, CA
Edward Latané Flanagan III	Gastonia
Beverely Ann Gibson	Wilmington
†Lloyd Eldon Griffin III	Elizabeth City
†George Thomason Grubb	Lexington
†Robert Lester Guidice	Phoenix, AZ
†Richard Robinson Hinson, Jr.	Matthews
Grady Allen Jackson	Roanoke Rapids
Angerlia Darlene Johnson	Rose Hill
Gail Hicks Johnson	Oxford
Tracee Alanna Johnson	Wilmington
†Terry Jerome Lindsey	Durham
†David Henry Lowry	Lutherville, MD
Larry David Mason	Memphis, TN
†Neil Patrick Mattison	Horseheads, NY
†Donald Pressley McCorkle, Jr.	Burlington
†William Clark Montgomery	Charlotte
Scott Warren Morningstar	Hickory
*James Luther Phillips, Jr.	Wilson
Nelson Wayne Ramsey	Raleigh
†Kevin Michael Robinson	Charlotte
Laura Lynn Stephenson	Knightdale
Margaret Ann Stewart	Concord
†John Marshall Tetterton, Jr.	Wilson
†Thomas Boyd Tompkins	Gastonia
Charles Jefferson Venable	Greenville
Fred Lamont Wade	Burlington
Arthur David Watson	Rocky Mount
†Robert Nolan Williard	Winston-Salem
Keith Erik Wold	Clemmons
Arthur Lee Wollett, Jr.	Hollister
†Mary Maria Zincone	Greenville

Degrees Conferred August 7, 1986

Susan Leigh Carpenter	Conover
Anne Martin Cooper	Raleigh
†Neil Carson Cox	Greensboro
James Richard Dalton	Mechanicsville, VA
Amy Parker Desormeaux	Smithfield
Timothy Charles Escott	Charlotte
†**Jenifer Lynn Girouard	Fayetteville
†Sharon Dawn Fulp Godwin	Walkertown
*Pamela Kae Goss	Creedmoor
†Douglas Arthur Gwaltney	Statesville
Gerald Dean Hardison, Jr.	Wrightsville Beach
†Dean Nickolas Harman	Raleigh
Clarissa Devorn Harvey	New Bern

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

†Vickie Lynn Howie	Chapel Hill
†Richard Huang	Cary
Robert Lee Lackey	Jamestown
*Melissa Ann Littlefield	Chapel Hill
†Marty Nore Martinussen	Fredericksburg, VA
Timothy Paul McGill	Jamestown
Jeffrey Arthur Moehling	Lenoir
†Leslye Malamut Mondragon	Salisbury, MD
Eleni Lisa Petrides	Raleigh
†Tommy Murdock Seay	Raleigh
†Amy Suzanne Stanley	Greensboro
Sally Victoria Stevens	Raleigh
*Linda Hussar Stow	Homewood, IL
*Joseph Lawrence Sugar	Fayetteville
†Robert Daniel Tavaglione	Raleigh
Douglas William Watson	Graham
†James Carson Welch, Jr.	Raleigh
Lorise Yvedt White	Washington, DC

Degrees Conferred December 16, 1986

†Renée Sue Alexander	Raleigh
John Wilson Atwater III	Asheboro
David Woodrow Baber	Durham
Michelle Ann Baggett	Sanford
†Walter Samuel Ballinger	Raleigh
Frances Elisabeth Batts	Wilson
David Richard Bevan	Raleigh
†Willis Lee Bodenhamer III	Rural Hall
Edgar Gerald Bowen, Jr.	Chapel Hill
†**Elizabeth René Bowen	Bath
†Lewis Drake Bratton	New Bern
Wes Burnette	Raleigh
Laura Fay Burns	Matthews
James Russell Capps, Jr.	Raleigh
Anne Finley Carlton	Salisbury
Carolyn Jewell Chandley	Wake Forest
Michael Steven Cherry	Bartlesville, OK
Susan Belle Coble	Burlington
Kenneth Mark Coggins	Cary
†Charles Howard Collie	Durham
Miriam Elaine Croom	Dover
†Julie Kay Currin	Oxford
***Melanie Sue Davenport-Movassaghi	Raleigh
†Robert Gerard DeVol	Washington, DC
†Patricia Dianne Dickens	Raleigh
Maria Lynn Drake	Cary
†Clay Royall Dunnagan	Myrtle Beach, SC
†Elisa René Earley	Laurinburg
†Cynthia Elaine Ellington	High Point
Kevin Patrick Emery	Raleigh
Angela Epps	Rocky Mount
†Marion Judd Gentry, Jr.	Raleigh
†Billy Glenn Gill	High Point
†John Randolph Green, Jr.	Raleigh
Graham Francis Gurnee	Greensboro
†Kenneth Walker Hagan	Raleigh
William Clinton Hale	Raleigh
†Carl DeMeyer Harris	Raleigh

†Co-major

* Cum Laude

** Magna Cum Laude

*** Summa Cum Laude

H Honors Program

Jason Scott Harris	Candler
James Edward Helms, Jr.	Fayetteville
Maria Gabrielle Hickman	Lenoir
Britt Elizabeth Hobgood	Durham
†Kimberly Michael Hocutt	Gastonia
Nancy Louise Hoffman	Chadds Ford, PA
†Donna Jo Horton	Burlington
†John Linzie Hoskins	Saratoga
†Nina Cloutier Jacobs	Raleigh
Mark McCollam Jenkins	Raleigh
David Todd Johnson	Raleigh
Carolyn Annette Jones	Raleigh
Roy Worth Jones, Jr.	Greensboro
*Pablo Fricke Juan	Las Palmas de G. Canaria, Spain
†Gregory Howard King	Fayetteville
Robert Carl Ladd, Jr.	Apex
†James Russell Ledbetter	Monroe
†Raymond Madden III	Raleigh
Dabney Johnston Mann	Raleigh
Christina Elizabeth Martin	Raleigh
Christopher Neil Martin	Wake Forest
LuAnn Massey	Zebulon
Julia Denise McLaurin	Wade
†Sydney Cheryl Sutton Mercer	Raleigh
†Thomas Lee Morrow	Mooreville
†Deborah Lynn Mulligan	Cary
Michele Ann Nicklaw	Wilmington
†Joseph William Pagani	Atlanta, GA
Marvin Edward Pair, Jr.	Roanoke Rapids
†Sam Giovanni Pasquale	Raleigh
†Michael Gerard Pesavento	Lockport, IL
Marylee Martha Patterson	Fayetteville
Charles Thomas Pelcher, Jr.	Fayetteville
Lowry Decatur Perry	Rocky Mount
†Bertha Alicia Pierce	Clayton
Elizabeth Mohan Pilson	Cameron
†James Gary Pittman	Raleigh
†William Hampton Pitts	Morganton
†Gregory Bruce Plemmons	Brevard
Karen Nelson Pursley	Raleigh
Sherry Lynn Reavis	Woodlawn, VA
James William Renna	Raleigh
April Leigh Reynolds	Star
*Ronald Francis Ruffner	Raleigh
Steve John Saieed	Greenville
†Kelly Anne Sanders	Asheboro
Sue Lynn Sloan	Chinquapin
Sonya Lane Sparks	Thomasville
Lorna Deneen Stanfield	Roxboro
**Carla Hodge Stinson	Greensboro
Pamela Ann Stoddard	Chester, NY
†Ronald John Strickland	Raleigh
John Leo Sullivan	East Chicago, IN
Rina Elizabeth Swaim	Winston-Salem
Tammie Lynne Tart	Dunn
William Charles Tedder, Jr.	Fairmont
Blaine Newcomb Tharrington	Warrenton
Jesse James Thomas	Dunn

†Co-major

* Cum Laude

** Magna Cum Laude

*** Summa Cum Laude

H Honors Program

†John Madison Thomas III	Morganton
Regina Kay Thorsen	Shallotte
†Janice Lynn Toothaker	Fayetteville
Bradford Gavin Tunell	Raleigh
Edmund Temple Turnley III	Rocky Mount
†Dixie Carol Tysor	Pittsboro
Maria Vesce	Raleigh
Michael Lee Wallace	Gastonia
†Amy Marie Wescott	Pittsburgh, PA
Sara Sherrill West	Roanoke, VA
Jeffrey Alan Wiblitzhouser	Raleigh
Robert Farrington Wilfong, Jr.	New Bern
Mary Thomas Wilson	Statesville
Mary Poole Woodlief	Wendell
Gary Steven Workman	Raleigh
Peter Patrick Young	Marshville
Ruth Ann Zabel	Sanford
†Pansy Lee Zimmerman	Charlotte
†Karl Albert Zurl	Goldsboro

Degrees Conferred May 9, 1987

†Rocco Thomas Aceto	Portland, ME
Edwardo Corneldious Alford	Benson
John Christopher Allen	Jamestown
†Teresa Lynn Allred	Burlington
Richard Cutchin Anderson	Tarboro
†Catherine Lynn Andrews	Goldsboro
***Sheryl Groden Andux	Miami, FL
†John Wyatt Armfield	Jamestown
†Jennifer Lynn Barbour	Pinehurst
Eric Hayden Beatty	Burlington
Steven Currie Bennett	Raleigh
Lisa Blackmon	Snow Hill
Kevin Ray Blanton	Raleigh
†Bradford Morgan Brady	Raleigh
James Gee Bramble	Fayetteville
Michael Henry Brisson	Salisbury
Thomas Linwood Brock, Jr.	Richlands
Walter William Brom	Burlington
Judith Ann Brooks	Durham
Robert Wayne Broome, Jr.	Hickory
†Leslie Ann Brown	Charlotte
Rebecca Jill Brown	Burlington
Vincent Allen Brown	Kings Mountain
†***Karen Allen Burkhead	Asheboro
†Arthur Donaldson Campbell	High Point
Mark Alan Carlton	Raleigh
Gail O'Neal Carr	Raleigh
†Stanley David Carr	Morehead City
†*Kenneth Etheridge Chapman	Taylorsville
†Otis James Christenbury III	Wake Forest
Lisa Renee Clary	Shelby
Michael Ross Coats	Raleigh
Kenneth James Cochran	Pineville

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

James Michael Cofer	Charlotte
†Joseph Contorinis	Raleigh
Debra Lynn Corley	Monroe
Jonathan David Cotterill	Advance
Virginia Pickett Council	Whiteville
†James Anthony Curtin	Raleigh
†John Hall Dameron	Greensboro
Peter Christopher Daut	Valley Cottage, NY
George Blethen Doane IV	Huntsville, AL
Edward Phillip Driver	Middlesex
Kevin Wayne Drum	Wilkesboro
John Michael Duffy	East Brunswick, NJ
†Allison Camille Duncan	Hickory
Michael Eugene Edgar	Raleigh
†George Joseph Ellison	Raleigh
†Angie Lynn Farmer	Rockingham
William Scott Ferguson, Jr.	Cary
Mark Raymond Fisher	Fayetteville
†Cynthia Lynn Fless	Trenton, NJ
Brenda Kay Flory	Lancaster, PA
†Debbie Lynne Geisinger	Fairfax, VA
*Adrienne Margaret Gibbs	Kensington, MD
*Amy Kathryn Gibbs	Winterville
†*Steven Lee Gilleland	Charlotte
†Marilou Gonzalez	Raleigh
Abbie Leigh Gray	High Point
Michaline Elizabeth Gray	Greensboro
†Beverly Anne Griffin	Winston-Salem
†Robin Ashley Gulledege	Monroe
†Celina Christine Hall	King
†James Patrick Hall	Fayetteville
†Laurie Ann Hamer	Charlotte
Jill Marie Hamilton	Oakton, VA
*Susan Elizabeth Hartwig	Raleigh
†Roxie Lou Hayes	Spring Hope
Amy Cates Hedrick	Durham
Carla Renee Helms	Robbins
Shelley Annette Helms	Morehead City
Shawn Rena Hendricks	Elizabeth City
Tanya Sue Hewett	Shallotte
†John Langston Holding	Concord
Norman Page Hornaday, Jr.	Sanford
Jeffrey Steven Hoskins	Pelham
†Tammy Jo House	Raleigh
†Bobby Joe Howard	Sanford
Edwin Charles Howell	Raleigh
Arnold Dale Hull	Hillsborough
*Derrick Lance Hurley	Mount Gilead
†Deborah Ann Hyder	Rutherfordton
†Brett Randal Johnson	Raleigh
†Gregory Kipland Johnson	Goldsboro
Samuel Harold Joyner	Wake Forest
Rebecca Ann Julian	Raleigh

Angela Marie Kenlaw	Washington
James Hubert Kennedy	Goldsboro
†Anne Elizabeth Kennett	High Point
Mary Kathryn Keyser	Raleigh
Mary Leigh Kieffer	Tampa, FL
†Andrea Alice Kops	Raleigh
†Linda Bailey Lambert	Raleigh
†Debra Anne Lindquist	Cary
†Mark Clayton Loflin	Monroe
†Jeffrey Longmire	Goldsboro
†Bret Thomas Luter	Raleigh
*Milanne Keegan Mansfield	New York, NY
†Robert Michael Marczak	Union, NJ
Maria Lynn Marraffa	Gaithersburg, MD
†Brian Preston Mavor	Cape Elizabeth, ME
†Brooks Mitchell Mayfield	Charlotte
†Traci Ann McClintock	Greensboro
David John McGean	Beaufort, SC
Todd Edward McKinney	Winston-Salem
Sandra Ann McVicker	Concord
Paul Carlyle Merritt	Rocky Mount
*Teresa Charlene Miller	Charlotte
Grover Martin Mitchell	Dunn
John Lewis Moore	Raleigh
*Jacqueline Irene Morabito	Waxhaw
Teresa Morris	Bethel
Larry Swain Mull	Greensboro
Jana Carroll Murdock	Troutman
†Kristi Michelle Murray	Winston-Salem
†Shari Michelle Nagle	Raleigh
*Betsy Lynn Nye	Raleigh
†Tonja Elizabeth Olive	Raleigh
†*William Joseph Owen	Sapphire
†Chester Stanley Pajerski II	Raleigh
Johnnie Richard Parker, Jr.	Wilmington
Kenneth Burton Parnell	Winston-Salem
Glenda Yvonne Parrish	Raleigh
†Michael Philip Partin	Raleigh
†Laura Anne Patton	Roanoke Rapids
†Donald Ray Peebles, Jr.	Raleigh
†Kimberly Suzanne Peninger	Rockingham
Nicholas John Pilos	Raleigh
†Jeffrey Ryan Porter	Greenville
Susan Marie Porter	Rockville, MD
†Cynthia Clapp Powsner	Rocky Mount
Gregory Scott Priddy	Greensboro
†Tracy Lynn Proctor	Lincolnton
Andrew Wesley Queen	Silver Spring, MD
†James William Quinton	Spindale
Leah Marie Ranney	Vienna, VA
†Todd Aaron Reasor	Houston, TX
Teresa Ellon Reynolds	Fayetteville

Kelly Reid Rhodes	Mooresville
Linda Johnston Rodgers	Charlotte
†Mark Conrad Rodriguez	Rockville, MD
†John Salvatore Romano	Rutland, VT
†Samer Roshdy	Raleigh
Timothy Carlton Ross	Wake Forest
†Khader Naim Sadi	Raleigh
Laraine Raymond Sanders	Cary
†Libby Cruz SanNicolas	Spring Lake
†Gary Curtis Shearer	Clyde
†Larry Edward Shope	Charlotte
Susan King Simkus	Raleigh
†Brian Forrest Simmerson	Salisbury
†Philip Alexander Smith	Winston-Salem
Scharme Elaine Smith	Hickory
†Patrick Thomas Stack	Raleigh
Tammie Sue Stamey	Valdese
†Scott Alan Stanford	Chattanooga, TN
Lorrie Jane Stanley	Raleigh
Larry Dean Strickland	China Grove
Susan Aaroe Sykes	Durham
†Young Thi Tran	Raleigh
Judy Denise Turner	Wallace
†Maurice Alan Tyler	Canton
†**Charles Stafford Umberger	Winston-Salem
†David Glenn Upchurch	Raleigh
†Lisa Ann Upchurch	Apex
Peter Francis Versfeld	Princeton, NJ
†Donald Allen Vess	Jacksonville
Scott Dunning Walker	Winston-Salem
†Sherry Marie Walker	Littleton
Susan Elizabeth Walker	Raleigh
†Steven Alexander Wallace	Hamlet
†Clayton Ingram Walters	Monroe
Carol Denise Watkins	Durham
†Franklin Cleveland White, Jr.	Raleigh
Patricia Ann Whitesell	Burlington
Kirk Craig Wille	Statesville
Steven Bradley Williamson	Lucama
†John Howard Wilson	Raleigh
*Jacqueline Frances Winters	Cary
†Steven Arthur Wollum	Raleigh
Elizabeth Kelly Workman	Charlotte

BACHELOR OF ARTS IN ECONOMICS

Degrees Conferred June 25, 1986

*Todd Steven Austin	Raleigh
†Ray Teague Canoy	Durham
†Daniel Thomas Crawford	Raleigh
†Matthew Jean DesVergers	Whiteville
†Lloyd Eldon Griffin III	Elizabeth City

†Co-major

* Cum Laude

** Magna Cum Laude

*** Summa Cum Laude

H Honors Program

†George Thomason Grubb	Lexington
†Robert Lester Guidice	Phoenix, AZ
†Richard Robinson Hinson, Jr.	Matthews
†Terry Jerome Lindsey	Durham
†David Henry Lowry	Lutherville, MD
†Neil Patrick Mattison	Horseheads, NY
†Donald Pressley McCorkle, Jr.	Burlington
†William Clark Montgomery	Charlotte
†Kevin Michael Robinson	Charlotte
†John Marshall Tetterton, Jr.	Wilson
†Thomas Boyd Tompkins	Gastonia

Degrees Conferred August 7, 1986

*Lisa Pearl Britt	Wilmington
†Neil Carson Cox	Greensboro
†Sharon Dawn Fulp Godwin	Walkertown
†Douglas Arthur Gwaltney	Statesville
†Dean Nickolas Harman	Raleigh
†Vickie Lynn Howie	Chapel Hill
†Richard Huang	Cary
†Marty Nore Martinussen	Fredericksburg, VA
†Leslye Malamut Mondragon	Salisbury, MD
†Tommy Murdock Seay	Raleigh
†Robert Daniel Tavaglione	Raleigh
†James Carson Welch, Jr.	Raleigh

Degrees Conferred December 16, 1986

†Renée Sue Alexander	Raleigh
Jeffrey Charles Autry	Fayetteville
†Walter Samuel Ballinger	Raleigh
†Willis Lee Bodenhamer III	Rural Hall
†**Elizabeth René Bowen	Bath
†Lewis Drake Bratton	New Bern
Michael Thomas Carrigan	Mooreville
†Charles Howard Collie	Durham
Scott Bernard Crowell	Shelby
†Julie Kay Currin	Oxford
Carol Whitley Dean	Wendell
†Clay Royall Dunnagan	Myrtle Beach, SC
†Cynthia Elaine Ellington	High Point
†Marion Judd Gentry, Jr.	Raleigh
†Billy Glenn Gill	High Point
†John Randolph Green, Jr.	Raleigh
William Henry Gurnee III	Greensboro
†Kenneth Walker Hagan	Raleigh
†Carl DeMeyer Harris	Raleigh
†Donna Jo Horton	Burlington
†Nina Cloutier Jacobs	Raleigh
†Gregory Howard King	Fayetteville
†James Russell Ledbetter	Monroe
†Raymond Madden III	Raleigh
†Sydney Cheryl Sutton Mercer	Raleigh
†Thomas Lee Morrow	Mooreville
†Deborah Lynn Mulligan	Cary
Patricia Nolan Newton	Rocky Mount
†Joseph William Pagani	Atlanta, GA
†Sam Giovanni Pasquale	Raleigh

†Co-major

* Cum Laude

** Magna Cum Laude

*** Summa Cum Laude

H Honors Program

†Michael Gerard Pesavento	Lockport, IL
†William Hampton Pitts	Morganton
†Gregory Bruce Plemmons	Brevard
†Ronald John Strickland	Raleigh
†Dixie Carol Tysor	Pittsboro
†Amy Marie Wescott	Pittsburgh, PA
†Pansy Lee Zimmerman	Charlotte
†Karl Albert Zurl	Goldsboro

Degrees Conferred May 9, 1987

†Rocco Thomas Aceto	Portland, ME
†Teresa Lynn Allred	Burlington
†Catherine Lynn Andrews	Goldsboro
†John Wyatt Armfield	Jamestown
Elzbieta Godlewska Banachiewicz	Raleigh
†Jennifer Lynn Barbour	Pinehurst
†Bradford Morgan Brady	Raleigh
†Leslie Ann Brown	Charlotte
†Arthur Donaldson Campbell	High Point
†Stanley David Carr	Morehead City
†Otis James Christenbury III	Wake Forest
Susan Belle Coble	Burlington
†Joseph Contorinis	Raleigh
†James Anthony Curtin	Raleigh
†John Hall Dameron	Greensboro
†Allison Camille Duncan	Hickory
†George Joseph Ellison	Raleigh
Angela Epps	Rocky Mount
†Angie Lynn Farmer	Rockingham
†Cynthia Lynn Fless	Trenton, NJ
†Debbie Lynne Geisinger	Fairfax, VA
William Edward Glattly	Raleigh
†Marilyn Gonzalez	Raleigh
*Jeffrey David Guinn	Delmar, NY
†Robin Ashley Gullede	Monroe
†Celina Christine Hall	King
†James Patrick Hall	Fayetteville
†Laurie Ann Hamer	Charlotte
†John Langston Holding	Concord
†Bobby Joe Howard	Sanford
†Brett Randal Johnson	Raleigh
†Gregory Kipland Johnson	Goldsboro
†Anne Elizabeth Kennett	High Point
†Andrea Alice Kops	Raleigh
†Linda Bailey Lambert	Raleigh
†Debra Anne Lindquist	Cary
†Mark Clayton Loflin	Monroe
Stuart Bryan Long	Tarboro
†Jeffrey Longmire	Goldsboro
†Robert Michael Marczak	Union, NJ
Christopher Neil Martin	Wake Forest
†Brian Preston Mavor	Cape Elizabeth, ME
†Brooks Mitchell Mayfield	Charlotte
†Traci Ann McClintock	Greensboro
Mary Lisa Newman	Spring Hope
†*William Joseph Owen	Sapphire

†Chester Stanley Pajerski II	Raleigh
†Michael Philip Partin	Raleigh
Jonathan Matthews Pease	Raleigh
†Kimberly Suzanne Peninger	Rockingham
Cynthia Clapp Powsner	Rocky Mount
†Tracy Lynn Proctor	Lincolnton
†James William Quinton	Spindale
†John Salvatore Romano	Rutland, VT
†Samer Roshdy	Raleigh
†Khader Naim Sadi	Raleigh
†Kurt David Schmidt	Wilson
†Gary Curtis Shearer	Clyde
†Larry Edward Shope	Charlotte
†Brian Forrest Simmerson	Salisbury
†Philip Alexander Smith	Winston-Salem
Ronald Bruce Spanton	Cary
†Patrick Thomas Stack	Raleigh
†Scott Alan Stanford	Chattanooga, TN
†Young Thi Tran	Raleigh
†Maurice Alan Tyler	Canton
†David Glenn Upchurch	Raleigh
†Lisa Ann Upchurch	Apex
†Donald Allen Vess	Jacksonville
†Sherry Marie Walker	Littleton
†Steven Alexander Wallace	Hamlet
†Clayton Ingram Walters	Monroe
†Franklin Cleveland White, Jr.	Raleigh
†John Howard Wilson	Raleigh

BACHELOR OF SCIENCE IN ECONOMICS

Degrees Conferred June 25, 1986

William Bradford Freeman	Raleigh
†Robert Wesley Huffstetler	Gastonia
Charles Fitzgerald Logan	Shelby

Degrees Conferred August 7, 1986

Thomas Hardin Jeffries	Henrietta
Lee Powell Parker	Virginia Beach, VA
*John Francis Sarp	Henderson
*Dona Elizabeth Shaw	Chapel Hill
Jack Dudley Watts, Jr.	Sanford

Degrees Conferred December 16, 1986

George Erick Bell	Wilson
Joseph Gaylord Byrum	Raleigh
Kirsten Lynn Dickey	Statesville
Thomas Ray Harris	Rocky Mount
Kathleen Linda O'Neill	Charlotte
Paul Gottfred Peterson	New Bern
Robert Allen Raynor, Jr.	Durham
Mark Walter Reams	Burlington
Charles Raymond Rogers III	Rocky Point
Alan Dean Smithwick	Raleigh

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

Degrees Conferred May 9, 1987

Dwight Allen Bishop	Raleigh
David Wesley Bryant	Demarest, NJ
Cenie Larrilyn Cain	Raleigh
Alfred Anthony D'Ottavio	Roanoke Rapids
David Randall Dowd	Fayetteville
Anthony James Evans	Shelby
Nathan Wayne Evans	Lexington
Joseph McNeill Everett	Apex
Robert Caull Garrou Exum	Fayetteville
Thomas John Fink, Jr.	Salisbury
Thomas Gregory Glasscock	Charlotte
Thomas Andrew Hamrick	Swansboro
†*John Kevin Hobbs	Manlius, NY
Dallas Wade Lackey	Morganton
Robert Kent Lange, Jr.	Chapel Hill
Edward Braddy Latham, Jr.	New Bern
Patrick Craig McIlhinney	Cherry Hill, NJ
Bryan Lee Norris	Raleigh
Christopher Scott Skidmore	Greensboro
Joseph Mark Waters	Raleigh
James Clarence Whitehurst III	Greenville
†John Howard Wilson	Raleigh

BACHELOR OF ARTS IN ENGLISH

Degrees Conferred June 25, 1986

Miriam Ellen Adkins	Baltimore, MD
Lisa Morgan Mills	Raleigh
Carolyn Elizabeth Stevens	Cary

Degrees Conferred August 7, 1986

*George Arthur Cox, Jr.	Brownsville, TX
Royce Weldon Espey, Jr.	Morristown, TN
Steven Kent Harrill	Shelby
Viki Balkcum Koobs	Goldsboro
***Robin Douglas Parsons	Raleigh

Degrees Conferred December 16, 1986

Darla Marie Anglen-Whitley	Garden Valley, ID
Mark Stephen Armagost	Lebanon, PA
Robert Neil Brown	Gastonia
*Rosemary Anne Del Fava	Hendersonville
Mary Jane Ethridge	Raleigh
Laura Marie Gunter	Lenoir
Dolores Maria Heib	Fayetteville
Maria Dallas Howard	Greenville
Susan Elliott Johnstone	Raleigh
Gretchen Winifred Langford	Roanoke Rapids
William Hunter McCray	Raleigh
Walter Jackson Mize	Tryon
**Debra Louise Moore	Athens, AL
Michele Dawn Craig Novotka	Raleigh

†Co-major

*Cum Laude

**Magna Cum Laude

***Summa Cum Laude

H Honors Program

Emily Ellen Poteet	Morganton
**Kelly Hinton Powell	Wake Forest
June Claire Upchurch	Raleigh

Degrees Conferred May 9, 1987

***Annis Cutchin Barbee	Garner
Deborah Lane Blackman	Raleigh
Erik Albert Bledsoe	Asheboro
Andrea Elaine Boyette	Raleigh
Patricia Janice Brasher	Raleigh
**Frances Croxson Calhoun	Lexington
Gary Randolph Churchill	Raleigh
Jeri Lynn Cifelli	Green Brook, NJ
Ethel Frances Clayton	Roxboro
Susan Denise Cole	Raleigh
***Lisa Ruth Cook	Granite Falls
Amy Jo Edwards	Raleigh
Timothy Wayne Ellington	Henderson
Suzanne Alison Fischer	Fanwood, NJ
Patricia Dawn Gazaleh	Wallace
Emily Lillian Georg	Hendersonville
***Rita Faye Goss	Creedmoor
†**Melanie Ann Griggs	Marshville
†Kelly Rae Hamrick	Fuquay-Varina
†Roxie Lou Hayes	Spring Hope
*Kathy Patrice Howard	Asheboro
Patricia Lynn Johnson	Candler
*Jessica Helene Kish	State College, PA
Angela Susan Knight	Charlotte
Teah Ann Little	Garner
*Patricia Anne Loftis	Raleigh
Patricia Lucretia Ludviksen	Raleigh
Doris Ruthette McLean	Lillington
Julie Elliott O'Neal	Cary
**Constance Cowell Piserchia	Raleigh
Margaret Weslie Rose	Raleigh
†Kurt David Schmidt	Wilson
Harriet Renée Shortt	South Boston, VA
Devin Duwayne Steele	Goldsboro
Samuel Lawrence Stowe	Raleigh
Joyce Smith Summerlin	Dudley
Pattie Lynn Templeton	Statesville
*Patrick Allen Turner	Cary
Karen Marie Weddington	Cary
**Herman Joseph Wetherington III	Morehead City

BACHELOR OF SCIENCE IN ENGLISH

Degree Conferred May 9, 1987

†*George Rhyne Hovis	Stanley
----------------------------	---------

BACHELOR OF ARTS IN FRENCH LANGUAGE AND LITERATURE

Degree Conferred June 25, 1986

Jeffrey Harold Karp	White Plains, NY
---------------------------	------------------

Degree Conferred December 16, 1986

***Richard Martin Dubois	Raleigh
--------------------------------	---------

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

Degree Conferred May 9, 1987

Lorraine Madeleine Freeman Raleigh

BACHELOR OF ARTS IN HISTORY

Degree Conferred June 25, 1986

Charles Henry Nintzel Norwalk, CT

Degrees Conferred August 7, 1986

Michael Jay Journigan Raleigh

Joseph Avery Wood, Jr. Raleigh

Degrees Conferred December 16, 1986

†Allison Kimberly Chappell Dobson

Marshall Bryan McDonald III Red Springs

Elaine Medaris Cullowhee

Marinda Lynn Sigman Henderson

Anne Lucille Stilwell Raleigh

Degrees Conferred May 9, 1987

Rachel Wilde Allen Kinston

Henry Wade Cayton, Jr. Greenville

Thomas Edward Eisinger Jacksonville, FL

Martha Deems Gourley Charlotte

*Deborah Carol Hicks Raleigh

†Henry Carson Jarrett Raleigh

Robert Brantley Johnson Raleigh

Louann Hinton Kitchell Raleigh

Susan Eilene Kuglitsch Milwaukee, WI

***Mary Lucinda Morgan Livermore, CA

Daniel John Parker Cary

Gregory Lee Provo Mechanicsville, VA

H Mona Lisa Russell Raleigh

Alan Lee Stolzman Toms River, NJ

*Anne Michelle Talmadge Hackensack, NJ

Jerry Richard Walker, Jr. Raleigh

*Malcolm Edwin Whittaker Raleigh

BACHELOR OF SCIENCE IN HISTORY

Degree Conferred December 16, 1986

John Raymond Callaway, Jr. White Lake

Degree Conferred May 9, 1987

Johnny Tuan Noyes Fayetteville

BACHELOR OF ARTS IN MULTI-DISCIPLINARY STUDIES

Degree Conferred August 7, 1986

Frank Bernard Yarborough Cary

Degrees Conferred December 16, 1986

†Patti King Drake Raleigh

Laurence Daniel Klein Chapel Hill

†Co-major

* Cum Laude

** Magna Cum Laude

*** Summa Cum Laude

H Honors Program

Angela Carroll Page	Greensboro
Gregory Lee Steele	Akron, OH

Degrees Conferred May 9, 1987

†Amy Lynne Byrd	Benson
Arthur Franklin Deloach, Jr.	San Antonio, TX
Robert Thomas Geolas, Jr.	Smithfield
†William Eugene Giles	Cary
Sophia Karteris	Fayetteville
†Sally Elizabeth MacDonald	Raleigh
Paul Nissen Montague III	Winston-Salem
†*Lee Anne Moore	Matthews
John Howard Pace, Jr.	Lexington
Susan Leigh Robertson	Raleigh
Mike Gregory Simpson	Charlotte
†Richard Allen Wallace	Garner

BACHELOR OF ARTS IN PHILOSOPHY

Degree Conferred December 16, 1986

*James Thomas Nunnally IV	Raleigh
---------------------------------	---------

Degree Conferred May 9, 1987

Kevin Blane Meadows	Goldsboro
---------------------------	-----------

BACHELOR OF SCIENCE IN PHILOSOPHY

Degree Conferred June 25, 1986

James Louis Littlefield	Greensboro
-------------------------------	------------

Degree Conferred May 9, 1987

**Brian Harrell Harbour	Cameron
-------------------------------	---------

BACHELOR OF ARTS IN POLITICAL SCIENCE

Degrees Conferred June 25, 1986

Wendy René Cushman	Jacksonville
Donald Eugene Johnson	Reidsville
Lee Rozakis	Raleigh
Stephen Gibbs Spain	Cary

Degrees Conferred August 7, 1986

Teresa Jeanne Fox	Rochester, NY
Marva Ann Hardee	Summerville, SC
Joseph Avin Simpson, Jr.	Beulaville

Degrees Conferred December 16, 1986

John Gregory Andrews	Charlotte
Robert Marvin Barker, Jr.	Charlotte
†Allison Kimberly Chappell	Dobson
***James Albert Clyburn	Raleigh
Bernard Warren Collier II	Forest City
James Walter Cox III	Pine Knoll Shores
Joel Clayton Cresimore	Raleigh
Steven Adam Emerson	Stafford, VA
Anne McLellan Ferguson	Raleigh

†Co-major	* Cum Laude	** Magna Cum Laude	*** Summa Cum Laude	H Honors Program
-----------	-------------	--------------------	---------------------	------------------

John Patrick Finegan	Hickory
Cornelia Cole Fox	Fayetteville
Bryan Wayne Griffin	Pinebluff
Thomas Scott Heiman	New Bern
Paula Pearson House	Greensboro
William Harrison Johnson	Alexandria, VA
Eiman Amin Khalil	Raleigh
Darryl Roy Ledbetter	Forest City
Scotland Alan May	Calabash
Dorethea Gayle Mebane	Burlington
Alfred Leslie Smith	Jackson Springs
Darden Winston Smith	South Boston, VA
Sherri Lynn Stone	Greensboro
Samuel Edmond Taylor, Jr.	Poughkeepsie, NY
Ida Perry Vann	Cary
Carmen Renata Wimberley	Raleigh

Degrees Conferred May 9, 1987

Warren Christian Acree, Jr.	Lynchburg, VA
Paul Steven Anderson	Raleigh
Mary Elizabeth Andolsen	Cleveland, OH
William Dillard Andrews	Raleigh
*James Robert Ayers	Lenoir
Jonathan Roger Barlow	Raleigh
*Alicia Myra Benson	Cary
Shelly Ann Bezanson	Charlotte
Mark Henley Black	Efland
Roberta Lynne Britton	Garner
Kenneth Darryl Burns	Fayetteville
Timothy James Byrd	Deep Run
Sean Michael Cassidy	Durham
Lawrence Dean Chandler	High Point
Ida Elizabeth Darden	Raleigh
Elizabeth Stacy Dortch	Charlotte
*John Lamar Edwards	Ayden
Kyle Purdom Fay	Winston-Salem
Ann Chandler Finch	Burlington
Tia Marie Ford	Asheville
**Kathleen Rouse Gainey	Hubert
Ronald Edward Gibson	Wake Forest
Michael Earle Glendy	Monroe
Vernon Carlyle Grimes III	Kenly
Anna Mae Hamburg	Miami, FL
Virginia Kimberly Hargett	Wingate
Thomas Ray Hash, Jr.	Raleigh
Reginald Renard Higgins	Winston-Salem
*Jason Cooper Hines	Morehead City
Allen Ralph Hoilman	Elk Park
Diane Arnold Horton	Raleigh
Freddie Gene Jackson II	Williamston
†Henry Carson Jarrett	Raleigh
Wayne Douglas Johnson	Charlotte
*Kirk Douglas Jones	Franklinville
Andrew Theodore Karres	Charlotte
Rabecca Ann Klemp	Cary
Bryan Edward Knox	Davidson
Charlene Lynette Meyers	Sophia

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

James Newsom Nowell II	Raleigh
Kevin Eugene Patterson	Rocky Mount
Robert Jackson Peele	Williamston
James Robert Phillips	Lenoir
Polly Ann Ross	Raleigh
Jeffrey Paul Rowland	Garner
Thomas Joseph Shircliff	Lynchburg, VA
Darien James Smith	Reidsville
David Archibald Sneed	Greenville
Robert Lester Wade II	Clemmons
Mark Alan Wartman	Chapel Hill
Carolyn Ruth White	Raleigh
Paula Rebecca Wood	Wilson

BACHELOR OF SCIENCE IN POLITICAL SCIENCE

Degree Conferred May 9, 1987

Lynda Jo Carter	Charlotte
-----------------------	-----------

BACHELOR OF ARTS IN SOCIOLOGY

Degrees Conferred June 25, 1986

Lundie Ruth Bradley	Raleigh
John Curtis Freeze	Kannapolis
Naomi Jane Gilewicz	Cary
Amy Elizabeth Green	Zebulon
Barbara Summerlin Honer	Warsaw
Jake Carvel Howard	Narberth, PA
Joan Eileen Pettinelli	Amherst, OH
Newell Smith Price, Jr.	Greensboro
Tonya LaVerna Stone	Burlington
Kenneth Wendell Withrow	Shelby

Degrees Conferred August 7, 1986

Robert Graham Berry II	Durham
Ronald Lee Byrd	Orange, NJ
Mark Armand Celedonia	Pittsburgh, PA
Julia Ann Driscoll	Cary
Harriet Williams Faison	Wilmington
Pamela Denise Laughinghouse	Greenville
Robin Leigh Magruder	Raleigh
Linda Faye Page	Philadelphia, PA
Susan Faye Scott	Kinston
Nancy Evelyn Sherrod	Sanford
Kurt Andrew Wentz	Germansville, PA

Degrees Conferred December 16, 1986

Tamara Lynn Bey	West Trenton, NJ
**Teresa Seongmie Cho	Raleigh
Donna Jo Coley	Raleigh
Stephen August Fonke	Fayetteville
Debra Lynn Fulton	St. Petersburg, FL
Roger Morgan Goode	Raleigh
**Cecilia Elizabeth Quarles	Hickory

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

Cynthia Ann Siliakus	Charlotte
John Michael Ward	Charlotte

Degrees Conferred May 9, 1987

**Jacqueline Suzanne Carpenter	Newland
Shelley Elizabeth Chambers	Roanoke Rapids
Sheila Lyn Johns	Raleigh
Vickie Lynn Linton	Raleigh
Melissa Lenée LuQuire	Raleigh
Georgia Spiros Nixon	Jamestown
Amanda JoAnn Reidenbach	Advance
Bonita Lee Stone	Cary
*Margaret Lee Williford	Raleigh

BACHELOR OF ARTS IN SPANISH LANGUAGE AND LITERATURE

Degrees Conferred June 25, 1986

Lisa Marie Hall	Fayetteville
†Mary Maria Zincone	Greenville

Degrees Conferred December 16, 1986

†Elisa René Earley	Laurinburg
†David Mark Heathcoat, Jr.	Tulsa, OK
Cindy Gail McLeod	Angier
Sarah Minwalla	Mocksville

Degrees Conferred May 9, 1987

Alexia Catenis	Raleigh
Elaine Carol Fanjoy	Raleigh
†Debbie Lynne Geisinger	Fairfax, VA
*Denita Bernice Gillespie	Dobson
***Jill Rashkis Goldman	Raleigh
†Beverly Anne Griffin	Winston-Salem
†Bret Thomas Luter	Raleigh
Catherine Marie McLeod	Raleigh
Sofey Saidi	Raleigh
Stacy Leahan Thomas	Vienna, VA
†Steven Arthur Wollum	Raleigh

BACHELOR OF ARTS IN SPEECH COMMUNICATION

Degrees Conferred June 25, 1986

Lorraine Marie Barclay	Cary
Terry Ann Freeman	Rocky Mount
Donald Alan Hilliard	Durham
***Anthony Addison Lea, Jr.	Raleigh
Julia Elizabeth McGee	Charlotte
Amy Marlane Morel	Huntington, NY
Ruby Geraldine Neal Palmer	Raleigh
Diana Joy Spruill	Roper
Karla Elaine Wilson	Fayetteville
Bonnie Bouché Woods	Charlotte

Degrees Conferred August 7, 1986

Lisa Maria Angelo	Charlotte
David Elliott Ballenger	Monroe
Carol Beth Beard	Fayetteville
Mariam Carol Chilman	Ridgewood, NJ
**Shelby Phelan Credle	Cary
Ann Hiatt Gibson	Roanoke, VA
Cassandra Dale Graham	Pembroke
Patrick Joseph Naratil	Newburgh, NY
Thomas Michael Neunsinger	Des Moines, IA
Kelvin Levon Reese	Orlando, FL
Alma Lorraine White	Havelock

Degrees Conferred December 16, 1986

Edward Paul Dettmar	Dallas
Robert Keith Doggett	Winston-Salem
†Patti King Drake	Raleigh
Gregory Alan Frady	Brevard
William Shepard Griswold III	Greensboro
Della Simmons Gullatt	Clayton
Terri Denise Holzschuh	Raleigh
Catherine Bradford Hunter	Charlotte
Carolyn Ann Joe	Raleigh
Brian Anthony Johnston	Hendersonville
Charles David Krause	Fayetteville
Tracey Johnson Lee	Garner
Scott Lawrence Luihn	Raleigh
Amy Ann Martin	Raleigh
Charles Douglas McDaniel	Charlotte
Albert Eugene Miller	Spindale
George Demetrios Nixon	Raleigh
John Howard Pace, Jr.	Lexington
Phaltheia Renee Parker	Richlands
Rebecca Anne Peebles	Raleigh
Terri Lynnette Porter	Boston, MA
Samuel Scott Reid	Raleigh
Aaron Douglas Schmidt	San Jose, CA
*Donna Anne Threadgill	Asheboro
Vincent Renalda White	Richmond, VA
Janet Hope Williams	Raleigh
Cathy Denise Williamson	Bullock
***Susanna Bridy Winters	Raleigh
Jay Anthoney Yvars	Valhalla, NY

Degrees Conferred May 9, 1987

Lynne Ann Alward	Raleigh
Christine Louise Arends	Durham
Mary Lynn Barton	Cincinnati, OH
Paul Clinton Bonesteel	Hendersonville
*Kathleen Theresa Borash	Raleigh
Amy Janine Britt	Newton Grove
**Linda Ellen Buchanan	Raleigh
†Amy Lynne Byrd	Benson
Carl Edward Caldwell, Jr.	Benson
*Emily Elizabeth Cameron	Raleigh
Mia Jo Canestrari	Danbury, CT
Anthony Capra	Raleigh
John Sloan Carney	Sanford

†Co-major

*Cum Laude

**Magna Cum Laude

***Summa Cum Laude

H Honors Program

Thomas Jeff Carter	Hobbsville
Rosemary Cartret	Nakina
†*Kenneth Etheridge Chapman	Taylorsville
Amy Michelle Clary	Cary
Bridget Carol Clayton	Roxboro
Elizalee Ferebee Cocke	Fairfax, VA
Wanda Denise Cohen	Atlanta, GA
Vickie Lynn DeWitt	Raleigh
Michael Gregory Dunn	Raleigh
Elizabeth Ann Forsythe	Greensboro
Tina Marie Games	Garner
Sally Ansel Garrett	Raleigh
Caroline Creadle Gay	Farmville
†William Eugene Giles	Cary
Laura Caroline Gotcher	Conover
†**Melanie Ann Griggs	Marshville
Dorothy Eugenia Guggenheimer	Lynchburg, VA
Shannon Rae Guite	Burlington
Daniel Patrick Halloran	Buffalo, NY
†Kelly Rae Hamrick	Fuquay-Varina
Nancy Webb Hare	Matthews
Susan Taylor Hawfield	Littleton
Robert Louis Hipsher II	Garner
*Kent Robert Hoffman	Rockford, IL
*Victoria Ann Johannsson	Fayetteville
Richard Alan Johnston	Boone
Wayne Thomas Kearney, Jr.	Raleigh
Mary Beth Kennedy	Wayne, PA
James Gardner Lassiter	Raleigh
†Sally Elizabeth MacDonald	Raleigh
David Charles McGaffin	Raleigh
*Regina McGill	Pawtucket, RI
Leo Patrick McGinty III	Greensboro
Donna Renée McMillian	Fayetteville
**Patricia Diane Metzler	North Jackson, OH
Jane Adkins Moore	Raleigh
†*Lee Anne Moore	Matthews
Jane Marie Mulgrew	Raleigh
Maureen Ann Murray	Merrimack, NH
Ernest Myers	New York, NY
†Shari Michelle Nagle	Raleigh
Germaine Nicholson	Littleton
†Tonja Elizabeth Olive	Raleigh
*Jill Renée Parker	Pineville
Alan Joseph Paternoster	Altavista, VA
Lindel Rose Pollert	Clinton
Lee Ferguson Porterfield	Burlington
*Darin Benjamin Rhue	Mebane
Pamela Marie Rogers	Washington
Laura Ann Schaefer	Lake Wylie, SC
Corbett Lee Scott	Lynchburg, VA
*Ted Hamilton Shinaberry, Jr.	Richmond, VA
*Patricia Ann Shore	State Road
Lori Sinclair	Clinton
Michelle Singer	Weehawken, NJ
Kristin Jayne Tichenor	Raleigh
Donna Jo Wall	Madison
Charlotte Elaine Wallace	Gastonia
†Richard Allen Wallace	Garner

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

Annette Marie Ward	Wilmington
Paula Channing Warrick	Yorktown, VA
Mary Kay Weatherman	Charlotte
Gwendolyn Lavinia Williams	Clinton
Roger Winston Winstead	Rocky Mount
Deneen Maralise Winters	Kinston
Bethany Jean Yates	Raleigh

BACHELOR OF SOCIAL WORK

Degrees Conferred June 25, 1986

Pamela Giles Bynem	Raleigh
Jennifer Coe Gaydon	Raleigh
Regina Shanti Girdharry	Greenville

Degrees Conferred December 16, 1986

Molly Maria Barnes	Saint Catherine, Jamaica
**Lori Anne Forbes-Talley	Fort Collins, CO
**Charles Derek Harkey	Denver
Frank Reid Horton	Raleigh
Elizabeth Ann Hunnicutt	Burlington
Margaret Inez Perry	Raleigh
*Tammy Elaine Spears	Raleigh

Degrees Conferred May 9, 1987

**Lynda Barnes	Palm Harbor, FL
Tracy Yvette Eberhart	Atlanta, GA
Deborah Vaughn Faison	Garner
†*Andrea Leigh Gragg	Newland
Jayne Allison Oliver	Sylva
Tammy Paulette Peeler	Salisbury

School of Physical and Mathematical Sciences



BACHELOR OF ARTS IN CHEMISTRY

Degrees Conferred June 25, 1986

Alicia Louise Spence	West End
Katherine Pratt Weeks	Cary

Degrees Conferred August 7, 1986

Elizabeth Dawn Garden	Rocky Mount
Allen Douglas Samuelson	Washington
Lisa Reneé Upchurch	Raleigh

†Co-major *Cum Laude **Magna Cum Laude ***Summa Cum Laude H Honors Program

Degrees Conferred December 16, 1986

David Brewer Couvillon	Ocean Isle Beach
Stephen Thomas Griffin	Indian Trail
David Todd Kusel	Southern Pines
Timothy Leary	New Bern
David Hembree Milner	Waynesville
Donald William Pfeiffer	Cumberland, MD
†Daniel Raymond Pitts	Asheville
Dewey Lee Raynor, Jr.	Wilson
Daniel Lee Woodard	Spring Hope

Degrees Conferred May 9, 1987

***Melissa Ann Brewer	Elon College
Donald Thomas Buckner, Jr.	Penrose
Beverly Denise Kilgore	Shelby
Mary Jo Meador	Ruffin
†*Daniel Gene Sinclair	Washington, NJ
Jerome Williams	Whiteville

BACHELOR OF SCIENCE IN CHEMISTRY

Degree Conferred June 25, 1986

†Robert Wesley Huffstetler	Gastonia
----------------------------------	----------

Degrees Conferred December 16, 1986

David Clair Dowdy	Greensboro
Linda Lee Ellis	Snow Hill
Rebecca Overcash Gollmar	Charleston, SC
Scott Haywood Gresham	Wilmington
†Phillip Edwin Hartzog	Yadkinville
Alan Nathan Sutton	Garner
Gary Edward Vinson	Knightdale

Degrees Conferred May 9, 1987

Kevin James Behen	Hampstead
**Christine Anne Berg	Raleigh
†**Kathryn Ellen Bergmann	Winston-Salem
Thomas Eugene Breeden, Jr.	Gastonia
William Edward Brewer	Mooreville
Jason Parham Burgess	Henderson
*Charles Paul Childers	Durham
**Sally Ann Copenhaver	Tryon
*Paul Erickson Friedrich	Cary
†***William Drummond Haig	Nashua, NH
*Jay Thomas Holt	Gastonia
†*George Rhyne Hovis	Stanley
Darrel Palmer Johnson	Henderson
†Marcia Marie Kutter	Raleigh
Robert Scott Muir	Greensboro
Shaun Kevin Starnes	Matthews
*Melody Caroline Williams	Williamston
H***Andrea Joan Chee Wong	Greensboro

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

Degrees Conferred June 25, 1986

Jonathan Edwin Holliday	Mount Olive
-------------------------------	-------------

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

Andrew Clay Parham	Wilmington
David Wallace Preo, Jr.	Havelock
David Fuller Ross	Concord
Robert Keith Sydnor	Raleigh

Degrees Conferred August 7, 1986

Paul Thomas Baker, Jr.	Kinston
Raymond William Curl	Mebane
*William Joseph Hughes, Jr.	Montgomery, AL
*Tina Louise Irving	Currituck
*Vivek Malhotra	New Delhi, India
Nitin Somabhai Patel	Raleigh
Elizabeth Craig Rigby	Winston-Salem
Melissa Strickland Rueda	Garner
Barbara Anne Scheible	Irondequoit, NY
Ellen Rebecca Shepherd	Linwood
Carla Yvonne Smithson	Elizabeth City
*Margo Helene Thomas	Cary
†*An Chul Yoon	Raleigh

Degrees Conferred December 16, 1986

Anju Khanna Ahuja	Delhi, India
Wanda Keturah Anderson	Columbia, SC
Arthur Fredrick Barnes	Raleigh
Jeffrey Lynn Broome	Carrboro
Carrie Anne Buckingham	Wilmington
Beth Chaffin	Knoxville, TN
†Eric Lamar Coates	Willow Spring
*Larry Nelson Cookman	Oxford
Cathy Loretta Dance	Wilmington
Tanja Lena Davidson	Kinston
Eric John Devitt	Raleigh
*Maria Doukas	Wilmington
Donna Jean Drummond	Hendersonville
***Victor Tracy Earnhardt, Jr.	Indian Trail
Patrick Wayne Eason	Garner
Gerald Leon Frederick	Charlotte
Bradley James Gibson	Raleigh
†Gail Lisa Gowdy	Wilmington
Ralph Wesley Graw	Ocala, FL
Dale Delane Hayes	Apex
Jonathan Bennett Hayes	Fayetteville
Christopher Todd Heavner	Gastonia
David Mark Holman	Creston
Edward Craig Hyatt	Raleigh
William Schatzel Ide	Greensboro
Darrell Wesley Key	Pilot Mountain
David Edward Kivett	Lewisville
**Lorraine Gregory Klingman	Raleigh
Douglas Wayne Lawson	Asheboro
Donna Joanne Lee	Charlotte
David Andrew Lees	Charlotte
Martin Alan Light	Mooresville
Malcolm Wright Lockhart	Concord
Leigh Ann Lutz	Charlotte
Tony Ray Martin	Raleigh
Richard Scott Matthews	Raleigh

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

Lisa Cante	McIntosh	.....	Goldsboro
Donald Lee	Meggs	.....	Wilmington, DE
Michael John	Orsa	.....	Queens Village, NY
***Sara Lynn	Pike	.....	Cary
Natalie Carol	Rambeaut-Phillips	.....	Garner
Stephen Fretwell	Roberts	.....	Jamestown
***Harvinder	Singh	.....	Raleigh
†***Rajendra	Prasad Singh	.....	Carrboro
Henry Maxton	Smith, Jr.	.....	Pittsboro
John Alan	Straub	.....	Harrisburg, PA
Gwendolyn Elaine	Taylor	.....	Charlotte
Lindi Lou	Teasley	.....	Durham
*Wesley Lee	Tilley	.....	Hillsborough
Kristopher Lee	Tyra	.....	Raleigh
Michael Roy	Viscount	.....	Poughkeepsie, NY
*Valerie Hatcher	Wallace	.....	Long Beach
James Robert	Weiss	.....	Cary
*Letha Jane	Woodruff	.....	Hays
Sharon Beth	Ziv	.....	Philadelphia, PA

Degrees Conferred May 9, 1987

Paul Arthur	Albrecht	.....	Raleigh
**Douglas Alan	Appleyard	.....	Chapel Hill
David Edward	Austin	.....	Hickory
**Paul Thomas	Barham	.....	Wake Forest
Jeffrey Allen	Barnes	.....	High Point
*John Terrell	Barringer II	.....	Bahama
***Timothy James	Bedard	.....	Carpentersville, IL
Christine White	Bissette	.....	Dobson
Gregory Allen	Bowman	.....	Walnut Cove
*Jennifer Babbette	Bradshaw	.....	Fremont
Catharine Ann	Breitbach	.....	Greensboro
Kimberly Evon	Burnette	.....	Canton
**James Wren	Carmichael	.....	Walnut Cove
Russ Michael	Cary	.....	Raleigh
Dennis Milton	Clark II	.....	Pembroke
*Rosemarie	Cournoyer	.....	Raleigh
Gene Weldon	Crenshaw	.....	Greer, SC
***Martha Drew	Crisson	.....	Cary
William Henry	Crocker	.....	Four Oaks
Teresa Diane	Dameron	.....	Fayetteville
Tonya Leigh	Davis	.....	Taylorsville
Jefferson Lee	Denmark	.....	High Point
†Robert John	Dolan, Jr.	.....	Cary
Cynthia Louise	Dowdy	.....	Fairfax, VA
*Robert Edward	Duggins	.....	Raleigh
John Calvin	Dyson, Jr.	.....	Climax
Kenneth Allen	Ellis	.....	Durham
*Kendra Anne	Embry	.....	Morrisville
Thomas Wray	Ferrell	.....	Burlington
Willard Henry	Gay	.....	Wendell
James Robert	Hale, Jr.	.....	Wilson
Stephen Blaine	Halula	.....	Marshall
Jerome Allen	Harrison	.....	Jacksonville, FL
*Louis Leon	Harrison	.....	Raleigh
†***John Reid	Hauser	.....	Cary
Djuna Gail	Hemphill	.....	Morganton

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

	*Cornelis Fredericus Hendriks	Woerden, Netherlands
	Tamera Denise Hinson	Albemarle
†	*John Kevin Hobbs	Manlius, NY
	Lynn Hong	Raleigh
	Arthur Laurence Hunt	Chapel Hill
	David Mason Johnson	Chapel Hill
H**	Richard Craig Johnson	Raleigh
	Keith Thomas Krotish	Mebane
	Dennis Andrew Laws	Burlington
	Melvina Lee	Havelock
	**Susan Jean Lee	Benson
	**Anne-Marie Agatha Katherine Leveille	Raleigh
	Michelle Harri Levey	Northside
***	Mary Leslie Lewis	Gastonia
	*Paula Kay Lowder	Albemarle
	**Karen Leigh Markov	Raleigh
	Maria Anne Marrocco	Waxhaw
	Gary Lee Mason	Westerville, OH
	*Sandra Laverne Mayo	Sanford
	*Rebecca Jane McQuain	Charlotte
	David Shields Micol	Hillsborough
	Robert George Mills	West Jefferson
H†***	Amy Fay Moormann	Morganton
	***Paul Bradford Nance	Pfafftown
	Thomas Paul Neal, Jr.	Carbondale, IL
	Stuart Alexander Nisbet	Cary
	Jacqueline Louise O'Grady	Wilmington
	Matthew Ramsdell Olson	Raleigh
	Anthony John Orr, Jr.	Charlotte
†**	Leila Ann Osteen	Rockingham
	*Seng Fuat Ou	Singapore, Singapore
	Ghassan Riad Oueijan	Kuwait, Kuwait
	*Jonathan Edward Parati	Charlotte
	**William Gregory Parrott	Oxford
	*Kerry Quay Peeler	Vale
	Robert Charles Pezzoli	Raleigh
	**Yvonne Colette Rabeler	Delhi, NY
†*	William Theodore Rankin	Greensboro
***	Lee Marshall Ratledge	Greensboro
	Jonathan Preston Reece	Raleigh
	**Luetta Felton Rhew	Raleigh
H***	David Blake Shamlin	Cary
	Veronica Lynn Shores	Lumberton
	Michael Alan Simpson	Philadelphia, PA
	Janet Leigh Small	Tarboro
	Ana Maria Suarez	Raleigh
	Elizabeth Wycliffe Talman	Canton
	*Danny Lynn Thomas	Burlington
	Lynn Phoi Trinh	Saigon, Vietnam
	Scott David Vodicka	Raleigh
*	Glen Richard Walker	Charlotte
	Kenneth Gene Webb	Fayetteville
	*Mack Denson Westbrook	Tarboro
	Louie Augustus Williams, Jr.	Gaston

Fred Anderson Wood Huntersville
 **Kanthi Satya Yedavalli Rajahmundry, India

BACHELOR OF ARTS IN GEOLOGY

Degree Conferred December 16, 1986

Susan Beth Broad Raleigh

BACHELOR OF SCIENCE IN GEOLOGY

Degree Conferred June 25, 1986

Jack Hamilton McGuinn, Jr. Greensboro

Degree Conferred August 7, 1986

Kenneth Ray Gilland Rockwell

Degree Conferred December 16, 1986

Sharon Stinneford Pait Edmond, OK

Degrees Conferred May 9, 1987

**Trevor Anthony Pierson Bannister Toms River, NJ
 Milton Gale Johnson Dunn
 Gary Clifton Walker Hickory

BACHELOR OF SCIENCE IN MATHEMATICS

Degrees Conferred June 25, 1986

Howard Lorenzo Briggs III Reidsville
 Jewelette Gracelynn Peterson Alexandria, VA
 Michiko Sakamoto Tokyo, Japan

Degrees Conferred August 7, 1986

Laura Anne Britt Raleigh
 *Michael Patrick Chernesky Bowie, MD
 †Teresa Lynne Clewis Wilmington
 *Sally Ann Cuninghame Elizabeth City
 Richard Elwood Rose III Smithfield
 **Douglas Leonard Wilson Tar Heel
 †An Chul Yoon Raleigh

Degrees Conferred December 16, 1986

Janice Anne Bills Cary
 †June La Verna Blackwell Morganton
 †Eric Lamar Coates Willow Spring
 Raymond William Curl Mebane
 John Claywell Hogan Lenoir
 Scott David Lewis Charlotte
 Jonathon Gold Luper Greensboro
 Hong Viet Pham Hickory
 Allyn Craig Spencer Greensboro

Degrees Conferred May 9, 1987

†**Kathryn Ellen Bergmann Winston-Salem

***Craig Rogers Eatmon	Annandale, VA
William Dean Henderson	Rocky Mount
H***Norma Jane Holland	Hickory
Franklin Dale Joyner	Ronda
H**Timothy Brian Koonce	New Bern
Scott Wayne McKnight	Washington, PA
†***Amy Fay Moormann	Morganton
**Sonya Leola Morrison	Stanley
Shavaughn Arleane Scales	Dudley
Ramondo Seneres	Elizabeth City
H**William Phillip Setzer	Hickory
H†**Michael Kelley Tippet	Raleigh
Timothy Gregg Waters	Raleigh
Stephanie Ann Welsh	Colonial Heights, VA

BACHELOR OF SCIENCE IN METEOROLOGY

Degrees Conferred June 25, 1986

*Robert Lloyd Bass	Montgomery, AL
Robert Jackson Carroll, Jr.	Warner Robins, GA
Barbara Ellen Drake	Delavan, IL
*Carolyn Ann Fitzwater	DuBois, PA
James Edward Hammett, Jr.	Greenville, SC
John Anthony Mitchell	Raleigh
**Mark Jerome Moore	Cincinnati, OH
Eric Arturo Negron	Leesville, LA
Scott Alan Rose	Smithfield
Steven Donald Skidmore	Antioch, IL

Degree Conferred August 7, 1986

*Patrick Neal Purcell	Atlanta, GA
-----------------------	-------------

Degrees Conferred December 16, 1986

Lester Dean Cruise	Bassett, VA
John Charles Duncan	Forest City
Matthew James Parker	Matthews

Degrees Conferred May 9, 1987

Randall Gerald Bass	New Bern
John Vanderbilt Denton, Jr.	Rocky Mount
Brent Allen Helmick	Townsend, MT
James Edward Hudgins, Jr.	Crewe, VA
Douglas Alexander Kennedy	Winston-Salem
Timothy Lee Kirby	Fries, VA
Elizabeth Diane Rumsey	Greer, SC
Phillip Barnes Williams	Rocky Mount

BACHELOR OF SCIENCE IN PHYSICS

Degree Conferred June 25, 1986

Robert Allen Williams, Jr.	Raleigh
----------------------------	---------

Degree Conferred August 7, 1986

Clinton Wade Jones Burgaw

Degrees Conferred December 16, 1986

†David Mark Heathcoat, Jr. Tulsa, OK
†***Simon Verghese Cary

Degrees Conferred May 9, 1987

†**Kelly Reid Bryant Kernersville
Carol Elizabeth Ellis Raleigh
†***Gerald Warren Gibson, Jr. Durham
†***William Drummond Haig Nashua, NH
H†*Wesley Scott Wilburn Apex

BACHELOR OF SCIENCE IN STATISTICS

Degree Conferred June 25, 1986

James Robert Sturdivant North Wilkesboro

Degree Conferred August 7, 1986

Scott Keith Isaacs Raleigh

Degrees Conferred May 9, 1987

Derik Benton Davis Graham
†Robert John Dolan, Jr. Cary
**Daniel Philip Dufour Old Town, ME
*John Whorton Egan Cary
James Lucian Polito Raleigh

School of Textiles



BACHELOR OF SCIENCE IN TEXTILE CHEMISTRY

Degree Conferred June 25, 1986

Susan Kimberly Ziglar Winston-Salem

Degree Conferred August 7, 1986

James Alan Gregory Charlotte

Degrees Conferred December 16, 1986

Benjamin Ray Crawford Greenville
Jeffrey Walter Jaeger Tryon
Simone Suzette Lawrence Raleigh

Dennis Lee Mater	Matthews
Linda Sanders	Fayetteville

Degrees Conferred May 9, 1987

Anna Hollingsworth Brown	Wilmington
Leslie Celeste Caskey	Winston-Salem
William Carey Cox	High Point
†**Charles Michael Hamilton	Charlotte
*Jeffrey Lee Harmon	Wilmington
Kenneth Charles Jones	Ayden
Owen Douglas McPeak	Waynesville
Shohreh Parandoosh	Tehran, Iran
H Doris Louetta Pierce	Clayton
†Carol Jean Robison	Raleigh
Garrett Allen Screws, Jr.	Pittsboro
Benjamin Burton Tart	Garner

BACHELOR OF SCIENCE IN TEXTILE MANAGEMENT

Degrees Conferred June 25, 1986

*Michael Daryl McGuire	Thomasville
Andreas Ingo Schoppel	Elmira, Ontario

Degrees Conferred August 7, 1986

James Thomas Briggs	Walnut Cove
Andrew Colton Ide	High Point
Glenn Walter Imboden	Burlington
Melanie Ann Starling	Statesville

Degrees Conferred December 16, 1986

Michael Andrew Archer	Cornelius
Daniel Thomas Baldecchi	Henderson
Raymond Robert Carrier, Jr.	Greensboro
Eric John Dailey	Raleigh
*Scott Andrew Engelmann	Morehead City
Lane Ferrell Goode	Raleigh
Edward Carter Hull	Charlotte
Steven Landon Jacobs	Greensboro
Gregory Hampton Johnson	Elkin
Jeffery Brian Locus	Rocky Mount
Milton Johnnie Marshburn, Jr.	Burlington
John Noell Roberts	Gastonia

Degrees Conferred May 9, 1987

Ramona Deanne Allison	Biscoe
***Marianne Lynn Bakita	Charlotte
Barbara Lynn Ball	Wilmington
Craig Steven Behringer	Gastonia
Lisa Renee Biesecker	Lexington
Galen Todd Brandon	Harrisburg
**Joe Dee Buchan	Henderson
Christine Elissa Buffey	Jamestown
Jerry Lance Carmichael	Fayetteville
Elizabeth Renee Cheek	Durham
Lloyd Henry Clark, Jr.	Kings Mountain

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

Paula Anne Crowder	Reidsville
Roger Alan Frazier	Charlotte
Hector John Furmage	Parkton
Emery Robert Hollar III	Lexington
***Timothy Carl Jones	Graham
*John Marshall Maness	Robbins
Edward Kent McLendon	Smithfield
Sheila Denise Medlin	Whiteville
Rosalind Evelyn Menditto	Kenilworth, NJ
Jonathan Armin Nañagas	Durham
Billy Dwayne Needham	Mount Airy
**Mary Catherine Patterson	Beford, NH
Donald Thomas Rodgers	Rutherfordton
Michael Paul Sasser	Raleigh
Anne Elizabeth Teer	Signal Mountain, TN
Kimberly Lillian Wright	Greensboro
Charlie Randolph Wynne	Henderson

BACHELOR OF SCIENCE IN TEXTILE SCIENCE

Degrees Conferred December 16, 1986

Andy Spencer Albright	Burlington
Norman Aminuddin	Jakarta, Indonesia
Ollie Keith Beasley	Raleigh
Andrew Neil Fraser	Greensboro
Gregory Alphin Lindsay	Mount Olive
Michael Earl Myers	Wilson
Christene Marie Ranieri	Greensboro

Degrees Conferred May 9, 1987

Jeffrey Earl Daye	Yadkinville
Thomas Van Hamilton	Rockingham
James Michael Monroe	Asheboro
Walter John Sweeney	Raleigh
Wilson Peter Tsalwa	Eldoret, Kenya
Pamela Renee Vaughan	Durham
Bradley Randall Way	Fayetteville

BACHELOR OF SCIENCE IN TEXTILES

Degrees Conferred August 7, 1986

Virginia Joan Burnette	Weaverville
Melissa Ann Elswick	Radford, VA
Randy Lutz Miller	Newton
Thomas Gregory Stanford	Lexington

Degrees Conferred December 16, 1986

Novizar Aminuddin	Jakarta, Indonesia
James Leslie Blalock	Durham
Mary Elizabeth Buerger	Colonial Heights, VA
Scott McClain Burgess	Raleigh
Molly Mary Claiborne	Greensboro
Laura Leigh Johnson	Hope Mills
John Guion Thomas, Jr.	Charlotte

Degrees Conferred May 9, 1987

Claudia Suzanne Deaton	Pilot Mountain
Fulton Allen Little	Wadesboro
Amy Felicia Novick	Pennington, NJ
Elizabeth Lee Oates	Lexington
Robin Lynne Simmons	Pleasant Garden
John William Thomas	Lewisville
Stephanie Suzanne Wallace	Clemmons

†Co-major * Cum Laude ** Magna Cum Laude *** Summa Cum Laude H Honors Program

GRADUATE DEGREES

Master's Degrees



MASTER OF AGRICULTURE

Degrees Conferred August 7, 1986

Lisa Karen Breeden	Spartanburg, SC
Brinton Alden Hopkins	Lewes, DE
Yvonne Marie Isenberg	Altoona, PA

Degree Conferred December 16, 1986

Kenneth Marshall Teeter	Kinston
-------------------------------	---------

Degrees Conferred May 9, 1987

Travis Brevard Burke	Hertford
Mark Dale Hucks	Middlesex
Kenneth Harold Kendall	Fayetteville
Thomas Albert Waddill	Meherrin, VA
Steven Wayne West	Waynesville
Nancy Jo Williams	Olin

MASTER OF ARCHITECTURE

Degree Conferred August 7, 1986

Mark Charles Wineburg	Queens, NY
-----------------------------	------------

Degrees Conferred December 16, 1986

Janey McCalla Gregory	Raleigh
Lyn Diane Miller McClay	Chapel Hill
Gregory Joseph Modelle	Vineland, NJ
Yasser Mostafa Momen	Cairo, Egypt
Ellen Leslie Weinstein	New York City, NY
Judith Law Williams	Chapel Hill

Degrees Conferred May 9, 1987

Terry William Barrett	Kings Mountain
Audrey Condoret	Chapel Hill
Thomas George Douglas, Jr.	Winter Park, FL
Diane Gladys Evans	Rockville, MD
Mary Margaret Hart-Paul	Raleigh
Patricia Gail Hill	Raleigh
Laura Elizabeth Joines	Durham
Gregory Lars Larson	Carbondale, IL
Andrew Norman Leager	Raleigh
Kyung Hoon Lee	Seoul, Korea
Mohamed Mustafa Momen	Cairo, Egypt
Glenn Lyle Peters	Kelowna, British Columbia, Canada

Audrey Hamilton Pitts	Panama City, FL
Karen Lindsay Skwara	Jacksonville, FL
James Walters Utley	Winterville

MASTER OF CHEMISTRY

Degree Conferred August 7, 1986

Bradley Steven Kagen	Raleigh
----------------------------	---------

MASTER OF CIVIL ENGINEERING

Degrees Conferred August 7, 1986

Wael Suleiman Arafat	Nablus, Palestine
Kenneth Lawrence Horton III	Raleigh
Soteria Andrea Kokkinou	Nicosia, Cyprus
Anwer Zuheir Kotob	Damascus, Syria
Monica Melanie Sprehe	Mars Hill

Degrees Conferred December 16, 1986

Randy Dean Ashburn	Raeford
Samer Salah Beidas	Raleigh
Robert Kinsman Fisher	Raleigh
Rome Leonard Hill	Raleigh
Thomas Goforth House	Lincolnton
Alan Randall Keith	Creedmoor
Sher Afzal Khan	Ismaila, Pakistan
Li-Chung Kwong	Taipei, Taiwan, Republic of China
Robert Reynolds Mason	Smithfield
Crag Alexander Perry	Raleigh

Degrees Conferred May 9, 1987

Imad Jawdat Abed-Al-Rahim	Tulkarem, Palestine
Yun-Hsi Chang	Kaohsiung, Taiwan, Republic of China
Chih-Hsing Hsu	Taipei, Taiwan, Republic of China
Amal Abdulrahim Irshaid	Amman, Jordan
Russell Everett Jones	Norfolk, VA
Mohammed Bakhtyar Mustafa	Raleigh
David Terkelatoub	Norfolk, VA

MASTER OF COMPUTER STUDIES

Degrees Conferred August 7, 1986

Craig Marvin Fox	Wallace
Michael Lawrence Helsabeck	Goldsboro
Ravinder Kumar Sabhikhi	Apex

Degrees Conferred December 16, 1986

Thomas Henry Barrett, Jr.	Raleigh
Sylvie Roberge	Le Perray, France

Degrees Conferred May 9, 1987

Edward Ray Austin	Raleigh
Janice Carney Calloway	Indianapolis, IN
Cheng Kuang Chien	Sao Paulo, Brazil
Paula Ann Dargan	Darlington, SC
Cheryl Gehring Garner	Lima, OH
Carol Ann Jones	Waynesboro
Tuan Liao	Taipei, Taiwan, Republic of China

Hongde Liu	Guangdong, People's Republic of China
Sanjay Anandrao Pol	Bombay, India
John Michael Vespoli	Raleigh

MASTER OF ECONOMICS

Degrees Conferred August 7, 1986

Jufu Chen	Sichau, People's Republic of China
Susan Shannonhouse Hawkins	Pittsboro
Yun-Ying Lu	Chang-Hua, Taiwan, Republic of China
Mary Young Rice	Raleigh

Degrees Conferred December 16, 1986

Suyapa Christina Funes	Tegucigalpa, Honduras
Erin Jean Gallogly	Raleigh
Parrie Lynn Henderson	Woodbine, MD

Degrees Conferred May 9, 1987

John Stuart McCarty	Raleigh
David Scott Robinson	Charlotte
Lillian Lih-Ling Yang	Taichung, Taiwan, Republic of China

MASTER OF EDUCATION

Adult and Community College Education

Degrees Conferred August 7, 1986

Lisa Kay Clark	Neenah, WI
Bobby Dale Edwards	Sparta
Mary Lee Fairley	Wadhams, NY
Jorge Luis Torres	Winston-Salem

Degrees Conferred December 16, 1986

Martha Marrison Vick	Wilson
James Gary Hyatt	Bakersville

Degrees Conferred May 9, 1987

Arthur Ray Brown	Selma
Anna Herring Cox	Four Oaks
Evelyn Deans DeLoatch	Rich Square
Mary Louise Williamson Fann	Clinton
Harvey Marshall Fouts	Franklin
Willa Stokes Harris	Angier
Ann Langdon Kaneklides	Dunn
Laurie Lamb	Clinton
Karen Sue Agnew Ramage	Smithland, KY
Clara Elizabeth Keith Rush	Garner
James Whitfield Simmons	Clinton
Lisandra Torres	Villalba, Puerto Rico

Agricultural Education

Degree Conferred August 7, 1986

Vernon Glenn Howell	Mill Creek
---------------------------	------------

Degree Conferred December 16, 1986

Clyde Wesley Adcock	Oxford
---------------------------	--------

Degrees Conferred May 9, 1987

Robert Daniel Blake III	Mount Gilead
Craig Joseph Mayes	Kings Mountain
Thomas Wayne Sawyer	Hertford
Gregory Gerald Simmons	Kinston

Curriculum and Instruction

Degree Conferred August 7, 1986

Valerie Watson Rogers	Raleigh
-----------------------------	---------

Degrees Conferred December 16, 1986

Elizabeth Ann Miller	Henderson
Mary Elizabeth Joyner	Zebulon
Leslie Edward Frahm	Raeford

Degrees Conferred May 9, 1987

Allison Jane Byrd	Cary
Susan Ethel Castlebury	Apex
Carol Wesley Davidson	Pittsboro
Marion Wilkins Davis	Raleigh
Susan Shirley Faulkner	Henderson
Laura Shapiro Labdon	Raleigh
Karen Southern Niegelsky	Raleigh
Phyllis Ellington Parker	Raleigh
Betty Jones Ramey	Henderson
Susan Gay Temple	Zebulon

Educational Administration and Supervision

Degree Conferred August 7, 1986

Thomas Glenn Filer	Altoona, PA
--------------------------	-------------

Guidance and Personnel Services

Degrees Conferred August 7, 1986

Connie Lynne Carson	Charlotte
Anne Reece Collins	Greensboro
Sherri Lincoln Holliman	Durham
Lynn Christine Williams	Murrysville, PA

Degrees Conferred December 16, 1986

Allison Jean Vogt	Raleigh
Elizabeth Marie Nelson	Raleigh
Johnsie Currin Kemp	Oxford
Danford Felton Groves	Dunn

Degrees Conferred May 9, 1987

Debbie Hauser Ashburn	Mount Airy
Norma Lynn Day	Raleigh
Nancy Willis Fahrback	New Bern
Michael Joseph Fedewa	Edmore, MI
Mary Louise Gardner	Rockingham
Leah Georgan Gregg	Willow Spring
Gayle Ford Hines	Garner
Brenda Sue Holleman	Durham
Betty Lynn Hurdle	Hertford
Christine Harnishfeger Mendes	Lima, Peru

Kokeita Mashun Miller	Goldsboro
Barbara Machado Seeger	Raleigh
Joyce Patrick Smith	Chattanooga, TN
Judith Ellen Smith Stephens	Fuquay-Varina
Thomas Michael Wallace	Charlottesville, VA
Phyllis Eubank West	Raleigh

Industrial Arts Education

Degree Conferred December 16, 1986

Thomas Wayne Shown	Raleigh
--------------------------	---------

Degree Conferred May 9, 1987

Cameron Jay Cuthrell	Elizabeth City
----------------------------	----------------

Mathematics Education

Degree Conferred December 16, 1986

Dorothy McNutt Riddle	Hope Mills
-----------------------------	------------

Degrees Conferred May 9, 1987

Kathryn Gibson Hill	Greensboro
Stephen Joseph Howard	Louisburg
Tammy Jane Jordan	Cary
Jane Reynolds Sullivan	Garner
Joan Augusta Thomas	Cary

Occupational Education

Degrees Conferred August 7, 1986

Jane Burruss Clayton	Raleigh
Rodney Franklin Farlow	Raleigh
Ronald Wendell Sutton	Elizabeth City

Degrees Conferred December 16, 1986

Ruth Kramer Brock	Morgantown, WV
Jacqueline Whitlark Parker	Sanford
Linda Faye McCaskill Wallace	Robbins
Mary-John Yenc	Sanford

Degrees Conferred May 9, 1987

Linda Ann Coleman	Raleigh
Mary Beth Darden	Durham
Joan Adams Galvin	Raleigh
Gail Bradshaw Joyner	Raleigh
Barbara Jones Lee	Smithfield
Bonnie Weiss Sykes	Cary

Science Education

Degrees Conferred August 7, 1986

Joyce Propst Eason	Raleigh
Ruth Jane Fuda Wormald	Cary

Degree Conferred December 16, 1986

Janet Allen Quick	Apex
-------------------------	------

Degrees Conferred May 9, 1987

Cleopatra High Carr	Raleigh
Doris Arnette Holland	Raleigh

Special Education

Degree Conferred August 7, 1986

Judith Benya Cornelius	Cary
------------------------------	------

Degrees Conferred December 16, 1986

Nancy Walker Rattelade	Raleigh
Catherine Mallernee Palmer	Wendell
Teresa Grey Barefoot	Dunn

Degrees Conferred May 9, 1987

Janet Lucille Dildine	Raleigh
Diane Louise Fenstermaker Esterly	Kutztown, PA
Judith Barber Frederick	Raleigh
Jacquelyne Lee Gordon	Lumberton
Mary Fugett Price	Raleigh
Robbie Lynne Pruitt	Rocky Mount
Mary Joanna Morgan Smaltz	Rolesville
Drusilla Esther Welborn	Raleigh
Susan Diane Wells	Raleigh

Vocational Industrial Education

Degrees Conferred August 7, 1986

Charles White Bass	Jackson
Robin Tatum Howard	Winston-Salem

MASTER OF ENGINEERING

Degree Conferred August 7, 1986

Dennis A. Newman	Asheville
------------------------	-----------

MASTER OF FORESTRY

Degree Conferred August 7, 1986

Frederica Wood	Raleigh
----------------------	---------

**MASTER OF INTEGRATED MANUFACTURING SYSTEMS
ENGINEERING**

Degrees Conferred August 7, 1986

Donna Tysinger Alexander	Lexington
James Marion Creel	Richmond, VA

Degrees Conferred December 16, 1986

Mark Edward McLain	Albemarle
Bruce Robert Winston	Raleigh

Degrees Conferred May 9, 1987

Linda Van't Wout Birch	Raleigh
Jeffrey Lynn Finch	Raleigh
Leslie Lindsey Hiteshew	Apex
Mark John Lawrence	Raleigh

Daniel John Monahan	Rockville, MD
Robert Edward Oehman, Jr.	Winston-Salem

MASTER OF LANDSCAPE ARCHITECTURE

Degrees Conferred December 16, 1986

Mercer Mason Bonney	Greensboro
Shawn McKenzie Clotworthy	Chevy Chase, MD
Gregory Stephen Hilt	Albany, NY
Beverly Ann Green Norwood	Raleigh
Howard Alan Partner	Monmouth, OR
Terrence John Smith	Manteno, IL
Kevin Joseph Tankersley	White Marsh, MD
Marsha Lynn Hayes Wylly	Cary

Degrees Conferred May 9, 1987

Lori Pfrang Allen	Smithfield
Virginia Beth Caufield	Danielson, CT
Catherine Lynne Johnston	Carbondale, IL
Katherine Patience Kamen	Raleigh
Thomas John Linden	Wethersfield, CT
Octavia Ann Micuda	Wilmington
Gregg N. Polubinsky	Raleigh
Jose Antonio Romero-Febles	Caracas, Venezuela
Wayne Walter Schindler	Raleigh
Jane Ellen Sheffield	Tampa, FL
Kathleen Ann Woods	Chapel Hill

MASTER OF LIFE SCIENCES

Degrees Conferred August 7, 1986

Daphne Annette Drew	Raleigh
John Adrian Moorefield	Raleigh
Rebecca Ann Pratt	Raleigh
Josef-Ann Smith	Warsaw

Degrees Conferred December 16, 1986

Lisa Ellen Huneycutt	Albemarle
----------------------------	-----------

Degrees Conferred May 9, 1987

Kimberly Ball Chandler	Rocky Mount
Lisa Regina Gholston	Wagram
Valerie Knight Melvin	Garner

MASTER OF MECHANICAL ENGINEERING

Degrees Conferred August 7, 1986

Peter John Falter	Apex
Frederick Mayon Faulcon	Nashville, TN

Degrees Conferred December 16, 1986

Wang-Yuan Hou	Ziamen, People's Republic of China
Courtney David Johnson	Burlington
Woo-Seung Kim	Seoul, Korea
David Welfred Kindley	Thomasville
Chang-Pin Lin	Taipei, Taiwan, Republic of China
Tyrone Rendell Moses	San Bernardino, CA

Degrees Conferred May 9, 1987

Taewon Kang	Seoul, Korea
Jerome McLin	Sparta, GA
Stephen Gerard Rea	Angier
Myung-Jin Sung	Seoul, Korea

MASTER OF NUCLEAR ENGINEERING

Degrees Conferred December 16, 1986

Kenneth Brian Gurley	Raleigh
Randall Scott Hawn	Shelbyville, IN
Daniel Joseph Morin	Gaithersburg, MD
Raymond Thomas Odierno	Rockaway, NJ

Degree Conferred May 9, 1987

David Joseph Kropaczek	Raleigh
------------------------------	---------

MASTER OF PRODUCT DESIGN

Degrees Conferred August 7, 1986

Sousan M. Asiaee	Tehran, Iran
Anthony Moery Grieder	Bloomfield, CO
Mark Richard McMurtry	Ellsworth, ME

Degrees Conferred December 16, 1986

Lee Jeannie Howe Ambrose	Pittsboro
Dennis Bryan Cooper	Valdese
William Wayne Godwin	Goldsboro

Degrees Conferred May 9, 1987

Kermit Lavon Bailey	Henderson
Chun Shan Chang	Taipei, Taiwan, Republic of China
Marise Fransolino	Curitiba, Parana, Brazil
Gina Gaurisas	Medellin, Colombia
Robert Edwin George	Lenoir
Deborah Sue Haeffele	Cary
Chao-Chang Liao	Taichung, Taiwan, Republic of China
Heather Elise Main	Greensboro
Jeng Ming Wang	Taipei, Taiwan, Republic of China

MASTER OF PUBLIC AFFAIRS

Degrees Conferred August 7, 1986

Jeffrey Barton Balentine	West Chester, PA
David Noel Cox	Greensboro
Elizabeth Weese Gurganus	Raleigh
Bryan Richard Hunt	San Jose, Costa Rica
Lachlan Forrest Kincaid	Durham
Sarah Henley Noell	Raleigh
David Wayne Oglesby	Mill Creek
Joseph Jack Umesi	Ogbuebulle, Nigeria

Degrees Conferred December 16, 1986

Thomas Scott Benton	Raleigh
Jack Franklin Coffey, Jr.	Raleigh
Brian Donald Gillette	Raleigh
Brian William Hadler	Inver Grove Heights, MN
Jeffrey Todd Kinsley	Durham

Zhiyong Lan	Nanchang, People's Republic of China
Robert William Owens, Jr.	Raleigh
Terri Jo Stamey	Clemmons
Jill Hubbard Touchberry	Burlington
Linda Ann Walters	Raleigh

Degrees Conferred May 9, 1987

P. Nixon Alexander	Mechanicsburg, PA
Steven Francis Bartolomei-Hill	Chillicothe, IL
Brenda Marie Blackburn	Boiling Springs
William Bradford Courtney	Williamston
Janet Rose Ferrell	Fayetteville
Frank Delano Gatton	Raleigh
Paul James Gross, Jr.	Selma
Charles Scott Hall	Montgomery, PA
Leo Charles Lachat	Cary
Jesse Raymond Lankford, Jr.	Raleigh
Norman Franklin Lewis III	Salemburg
Maia Willine McAnulty	Asheboro
Patrick Gene Starke	Binghamton, NY
Alphonsa White	Jacksonville

MASTER OF RECREATION RESOURCES ADMINISTRATION

Degrees Conferred May 9, 1987

Mary Ellen Burkee	Worth, IL
Pamela Lynn Gourley	Taylorville
Deborah Halstead	Chatham, NJ
David McDaniel Shouse	Raleigh
Lisa Kay Speas	Tobaccoville

MASTER OF SOCIOLOGY

Degree Conferred May 9, 1987

Sandra Hart Wallace	Oxford
---------------------------	--------

MASTER OF STATISTICS

Degree Conferred December 16, 1986

Mary Theresa Butler	Salem, MA
---------------------------	-----------

Degrees Conferred May 9, 1987

Consuelo Ugarte Arellano	Lima, Peru
Yvonne Moore Coston	Statesville
Virginia Marie Lesser	Mount Carmel, PA
Mary DeVere Keller Maine	Roan Mountain
Alexander David McDonald	Adelaide, South Australia
Mary Katherine Nations	Kingsport, TN

MASTER OF TECHNOLOGY FOR INTERNATIONAL DEVELOPMENT

Degree Conferred May 9, 1987

Kayan A. Jaff	Raleigh
---------------------	---------

MASTER OF TEXTILES

Degrees Conferred August 7, 1986

Connie Elaine Britt	Goldsboro
Diane Claire Phillips	Braintree, MA

Degree Conferred May 9, 1987

Elizabeth Ann McCracken Siler City

MATER OF TOXICOLOGY

Degree Conferred August 7, 1986

Kevin Horace Denny Raleigh

Master of Arts Degrees



Archival Management

Degree Conferred December 16, 1986

Richard Wesley Hite Cary

Degree Conferred May 9, 1987

Michelle Alverda Francis Purcellville, VA

English

Degrees Conferred August 7, 1986

John Sherman Elledge, Jr. Hays

Sabra Eubanks Heagle Fayetteville

Teresa Diane Brown Jones Buies Creek

William James Owen Raleigh

Degrees Conferred December 16, 1986

Judith Ann Stokes Chavis Muskogee, OK

Dana De Witt Garden Grove, CA

Deborah Jean King Vause Youngsville

Carole Lynn Weeks Asheboro

Degree Conferred May 9, 1987

David Alan Teal Raleigh

Political Science

Degrees Conferred August 7, 1986

John Andrews Cogley Lima, OH

James Leroy Dunn Birmingham, AL

John Albert Gagnon Russell, NY

Degrees Conferred December 16, 1986

Roger Leo Colombana San Francisco, CA

Karol Joseph Kawalec Philadelphia, PA

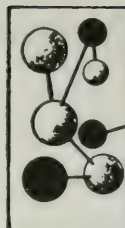
Glenn Lew Morton Carlisle, PA

Keith Homer Snook Sacramento, CA

Degree Conferred May 9, 1987

Richard Allison Rail, Jr. Kansas City, KS

Master of Science Degrees



Adult and Community College Education

Degree Conferred December 16, 1986

Narayan Bahadur Rajbhandari Lalitpur, Nepal

Degrees Conferred May 9, 1987

William Gregory Ingram Chapel Hill
Othman Bin Haji Omar Kota Kinabalu, Malaysia

Aerospace Engineering

Degree Conferred August 7, 1986

Richard Alan Wahls Raleigh

Degrees Conferred December 16, 1986

Richard Lee Gaffney, Jr. Fayetteville
Allen Kenneth Jarrell Norfolk, VA

Degrees Conferred May 9, 1987

Foy McNeil Cheatwood Winston-Salem
Mark David Klinge Glen Ellyn, IL
Cary Allen Moskovitz Greensboro
Paul David Orkwis Cary

Agricultural Economics

Degree Conferred December 16, 1986

Rodrick Arthur Skewes Lexington, KY

Agricultural Education

Degree Conferred August 7, 1986

Julia Renee Capps Princeton

Animal Science

Degrees Conferred August 7, 1986

Harvey Rexford Gaskins III Morehead City
Barbara Muszar Smith Biloxi, MS

Degrees Conferred December 16, 1986

Akhmad Prabowo Bogor, Indonesia
Gregory Brian Traywick Marshville

Degrees Conferred May 9, 1987

*Amy Ann Hocutt Raleigh
Ellen Smith Leonard Beaufort

Biochemistry

Degree Conferred December 16, 1986

Ivo Ambrose Wortman III Pittsboro

Degrees Conferred May 9, 1987

*Amy Ann Hocutt Raleigh
Askale Mathias Addis Ababa, Ethiopia
Ngoc-Qyynh Thi Trinh-Rohlik Wake Forest

Biological and Agricultural Engineering

Degrees Conferred August 7, 1986

Darrell Woodley Donahue Mocksville
Roger Michael Hoy Athens, GA
Azzedine Lansari Algiers, Algeria
**Carl Thomas Thurnau Burnt Hills, NY

Degrees Conferred December 16, 1986

David Julio Acuna Maraciabo, Venezuela
Rose Mary Seymour Charlotte

Degrees Conferred May 9, 1987

Trip Alihamsyah Pamekasan, Indonesia
John Martin Owens Huddleston, VA
Heman Clifford Ward Rocky Mount

Botany

Degrees Conferred December 16, 1986

Nompembelelo Siwundla Zwelitsha, South Africa
Elizabeth Waters Brooklyn, NY

Degrees Conferred May 9, 1987

Carol Lynn Blaney Covina, CA
Ademola Lala Ejire Lagos, Nigeria

Chemical Engineering

Degrees Conferred December 16, 1986

Joseph Luther Parker Florence, AL
Robert Glenn Teer Raleigh
Michael Alan Vancil Oregon City, OR

Degrees Conferred May 9, 1987

Mark Alan Bogard Jacksonville, FL
Andrew Robert Hubik Norwalk, CT

Chemistry

Degree Conferred August 7, 1986

Alan Thomas Lynch Jamestown

Degrees Conferred December 16, 1986

Johnnie Lee Leazer, Jr. Huntersville

*Co-major in Animal Science and Biochemistry

**Co-major in Forestry. See page 89.

Gerald Alan Long	Gastonia
Surya Narayan Satapathy	Burlington
Craig Anthony Tucker	Elon College

Degrees Conferred May 9, 1987

Samuel Bruce Balik	Raleigh
Francis Joseph Blacha	Blackwood, NJ

Civil Engineering

Degrees Conferred August 7, 1986

George Leon Eller	High Point
Hueihlirn Lee	Taipei, Taiwan, Republic of China
Sanjeev Srivastav	Roorkee, India

Degrees Conferred December 16, 1986

Hisham A. L. Ibrahim Abdelfattah	Alexandria, Egypt
Thomas Alexander Chisholm	Raleigh
Jeremy James Pearson	Cary
John Michael Talley	Knightdale
Cheo-Woei Wu	Taipei, Taiwan, Republic of China

Degrees Conferred May 9, 1987

Doron Alterman	Haifa, Israel
John Robert Arnall, Jr.	Perry, GA
Nimal Newton Jayaratne	Raleigh
James Jackson Swain, Jr.	Asheville

Computer Studies

Degree Conferred August 7, 1986

Lynda Ann Kosowsky	Clifton Park, NY
--------------------------	------------------

Degrees Conferred December 16, 1986

Vijay Gerard D'Silva	Bombay, India
Sun-wah Kiu	Hong Kong
Judy Christine Peedin	Roanoke Rapids
Tso-Jen Eric Wang	Taipei, Taiwan, Republic of China
Shwu-Wei Yeh	Yungher City, Taiwan, Republic of China

Degrees Conferred May 9, 1987

Ruth Ann Balla	Nanticoke, PA
Wei-Lu Cao	Tucker, GA

Crop Science

Degrees Conferred August 7, 1986

Natalie Louise Hubbard	Erie, PA
Sanun Jogloy	Nonthaburi, Thailand
Maria Gallo Kramer	Port Chester, NY
Stephen Arthur Prior	Fayetteville
Diane Louise Rose	Raleigh
William Blunt Rose	Elm City
Frederick Wright Smith	Raleigh

Degrees Conferred December 16, 1986

Thomas Alfred Bartholomew, Jr.	Raleigh
John Dukes Byrd, Jr.	Hartsville, SC

Degrees Conferred May 9, 1987

David Lee Holshouser	Salisbury
Lisa Peatross Schell	Raleigh
Derek Cuyler Smith	Goldsboro
John Samuel Wilson	Cary

Curriculum and Instruction

Degree Conferred December 16, 1986

Mark Brian Dearmon	Kannapolis
--------------------------	------------

Electrical and Computer Engineering

Degrees Conferred August 7, 1986

Lance Lee Arnder	Goldsboro
Russell Lee Barnes	Burlington
Michael Eugene Bates	Havana, IL
Jason Yi Blakely	Saint James, MN
James Richard Burke	Cary
Tien-Lu Cheng	Tainan, Taiwan, Republic of China
Bennett Ross Groshong	Oak Ridge
Jong Whan Jang	Seoul, Korea
Nadia Asaad Khalil	Gaithersburg, MD
Hsing Bang Lin	Panchiao, Taiwan, Republic of China
Shree Kimar Nayar	New Delhi, India
Paul Jonathan Seifert, Jr.	Fayetteville
Ding-Gong Wang	Taipei, Taiwan, Republic of China
Leonard Wilson White	Raleigh
Nancy Lynn Wilkens	Winston-Salem
Gary Alan Ybarra	Southern Pines

Degrees Conferred December 16, 1986

David Stephen Bryan	Raleigh
Kuang-Hsien Chris Chen	Taipei, Taiwan, Republic of China
Tung-Hai Timothy Cheng	Taipei, Taiwan, Republic of China
Srinivas Chittilla	Durham
Seungmoo Choi	Seoul, Korea
Honpun Benny Fong	Hong Kong
Walter Scott Guest	Shelby
Harish Pura Hiriyannaiah	Bangalore, India
Yih-Liang Jou	Ping-Tung, Taiwan, Republic of China
David Scott Lalush	Rockville, MD
Imad Eldin Osman Mahgoub	Port Sudan, Sudan
Mark Douglas McDonald	Durham
Arthur Sherman Morris III	Cary
Jong Sou Park	Raleigh
Pinakin Arvind Patel	Raleigh
Sarah Oliver Peterson	Raleigh
Chandan Sen	Raleigh
Danny Ervin Stoneking	Swansboro
Malcolm Scott Ware	Raleigh
Todd Russel Weatherford	Bellmawr, NJ
Wen-Chung Wu	Taipei, Taiwan, Republic of China
Mingchih Yu	Taipei, Taiwan, Republic of China

Degrees Conferred May 9, 1987

Christopher Joseph Barlock	Raleigh
Henry Charles Benz	Cary
Richard Lester Butner	Winston-Salem

Patrick Louis Combettes	Paris, France
James Michael Conrad	Cary
Donna Beatty Cybrynski	Cary
William Clarence Donaldson	Raleigh
Jiann Hwa Fuh	Taichung, Taipei, Republic of China
Michael Karl Gowan	Raleigh
Man-Yoo Han	Anyang-Si, Kyunggi-do, Korea
Steven Thomas Hand	Columbia, SC
Dan Owen Harris	Hickory
James Jay Hershberger	High Point
Ming Ho	Haichung, Taiwan, Republic of China
Jae Gil Jeong	Seoul, Korea
Jack Daniel Johnson	Raleigh
Omar Hassan Karam	Alexandria, Egypt
Ganeshan Krishnamurthi	Bangalore, India
Bih-Hwang Lee	Kaohsiung City, Taiwan, Republic of China
Vincent Lee	Hsin-Tien, Taiwan, Republic of China
Charles Victor McCarn	Birmingham, AL
Constanza Hamann Merchan	Bogota, Colombia
Martin Dean Meyer	Raleigh
Stephen Charles Meyer	Lumberton
Helen Wen-Yan Miao	Shanghai, People's Republic of China
Chris Michael Mortada	Raleigh
Ramin Nobakht	Raleigh
Steven Edward Pace	Cary
Doo-Yeong Park	Seoul, Korea
Ming Parng	Taipei, Taiwan, Republic of China
Michael Petrowski III	Charlotte
Wen Kwei Rou	Taipei, Taiwan, Republic of China
Don Mark Royals	High Point
Lynn Allan Rupp	Wauseon, OH
Poonthavee Sujjayakorn	Bangkok, Thailand
Charles Richard Sykes, Jr.	Pinebluff
Shaw kang Wu	Taipei, Taiwan, Republic of China
Jing-Bang Yan	Tainan, Taiwan, Republic of China

Electrical Engineering

Degree Conferred August 7, 1986

Robert Norman Schwartz	Durham
------------------------------	--------

Degree Conferred December 16, 1986

Alexander Garland MacInnis	Chapel Hill
----------------------------------	-------------

Degree Conferred May 9, 1987

Lee Daniel Lancaster	Pikeville
----------------------------	-----------

Entomology

Degrees Conferred August 7, 1986

Maria del Rosario Alzugaray	Montevideo, Uruguay
Michael Edward Duke	Ramey, PA
(Degree granted posthumously)	
David Gerard Riley	Boston, GA

Degrees Conferred December 16, 1986

Sukarsih Fatchurochim	Bogor, Indonesia
David Jeffrey Hawthorne	Geneva, NY
Imam Prasadja	Bogor, Indonesia

Degrees Conferred May 9, 1987

Richard Wesley Etzel	Oxon Hill, MD
David Alan Kramer	Bay Shore, NY
Nancy Antoine Leidy	Mobile, AL

Food Science

Degrees Conferred August 7, 1986

Laura Jane Mackintosh	Fairfax, VA
Peter Michael Muriana	Bridgeport, CT
Raul Alfredo Pinedo	Caracas, Venezuela

Degrees Conferred December 16, 1986

Deborah Alice Saliba	Brookfield, WI
Vicki Lynn Vigdorth	Manchester, TN

Degrees Conferred May 9, 1987

Lawrence Alan Chandler	Cary
Pamela Louise Chang	Okemos, MI
Rose Marie Martinez	Jacksonville
Sara Jane Morrison-Rowe	Trenton, MI

Forestry

Degrees Conferred August 7, 1986

Mark Arthur Megalos	Catskill, NY
Eric John Schmeckpeper	Naples, FL
**Carl Thomas Thurnau	Burnt Hills, NY

Degrees Conferred December 16, 1986

Alan Belles Anderson	Raleigh
Christopher Douglas Geron	Springfield, OH
Kathryn Rose Markle	Lorain, OH
Marc Eric McDill	Custer, SD
Paul Arthur Nelson	Petoskey, MI
Kurt Davis Pennell	Harvard, MA
Scott John Torreano	Negaunee, MI

Degrees Conferred May 9, 1987

Milton Kanashiro	Belem, Para, Brazil
Joyce Ruchte Madden	Raleigh
Jane Elizabeth Mudano	Saint James, NY
Karen Elizabeth Papke	Durham

Horticultural Science

Degree Conferred August 7, 1986

Betsy Lee Shoemaker	Sunbury, PA
---------------------------	-------------

Degrees Conferred December 16, 1986

Elizabeth Jeanne Mitchan-Butler	Derwood, MD
Barbara Gale Auxier Moore	Pittsboro
David Michael Saravitz	Taylor, PA

**Co-major in Biological and Agricultural Engineering. See page 85.

Degree Conferred May 9, 1987

Carl Edwin Motsenbocker Penfield, NY

Industrial Engineering

Degrees Conferred August 7, 1986

Anna Kathryn Bray Reidsville
Jeremy Bret Farber Raleigh
Robert Eugene Fulenwider Raleigh
Trudy Diane Justice Raleigh
Ganesh Rao Kalbavi Mangalore, India
Taryn Smith Moody Severna Park, MD
Aydin Yardim Istanbul, Turkey

Degrees Conferred December 16, 1986

Kathryn Strader Glenn Burlington
Jeffry Lee Green Raleigh
Mary Karen Wiggin Thomasville

Degrees Conferred May 9, 1987

Danny Edward Abrams Russell, KY
George Robert Auten, Jr. Belmont
Juan Jose Daboub San Salvador, El Salvador
Nancy Lee Johnson Larson Cary
Dong-Yuan Shiao Tounan, Taiwan, Republic of China
Kamil Yavuz Ankara, Turkey
Hseauh-Fong Yeh Hsin-Chu, Taiwan, Republic of China

Management

Degrees Conferred December 16, 1986

Michael Delane Brown Durham
Stephen Willis Fisher Knightdale
Torre Max Palmer Durham
Ralph John Potok Cary
David Arthur Sparrow Durham

Degrees Conferred May 9, 1987

Normaizan Abdul Aziz Raleigh
Khaled Mustafa Al-Hasan Jericho, Jordan
Dexter Robert Cole Durham
Robert Ernest Davis Winston-Salem
Ruth Noland Jones Waynesville
James Eugene Kaylor Conover
Charles Franklin Lassiter Raleigh
Ching-Chun Meng Richmond, VA
Michael Fitz-Patrick Mussack Cary
Henry Nemargut Wilmington
Vicki Carol Odom Fayetteville

Marine, Earth and Atmospheric Sciences

Degrees Conferred August 7, 1986

David Edward Blake Charlotte
Gerald Lee Freeman Raleigh
Robert Sanger Jacobs Merion, PA

Degrees Conferred December 16, 1986

Dean Nelson Argenbright Staunton, VA

Frank Lively Estis	Richmond, VA
Nancy Ann Langs	Mokena, IL
David Noble Martin	Rochester, NY
Graham Hanson Simmerman, Jr.	Radford, VA
Suzanne Marie Viessman	Lincoln, NE
David Curtiss Weintraub	Miami, FL

Degrees Conferred May 9, 1987

Lindsey Dianne Clark	Parkersburg, WV
Melanie Ese Ida Cookey	Warri, Bendel, Nigeria
Kathy Dawn DePatra	Lakeland, FL
James Fredrick Lape, Jr.	Bellevue, KY
Henry Wortham Lyon	Buies Creek
Linda Darlene McCann	Middleton, WI
Donald Theodore Olerud, Jr.	Hamlet

Materials Science and Engineering

Degrees Conferred August 7, 1986

Terry Lynn Alford	Fayetteville
Marshall Troutman Sykes	Pinebluff

Degree Conferred December 16, 1986

Magdi Abdel-Hamid Said	Raleigh
------------------------------	---------

Degrees Conferred May 9, 1987

Mara Robin Schwartz	Raleigh
Sreeram Srinivasan	Madras, India

Mathematics (Applied)

Degrees Conferred August 7, 1986

Solomon Abraham	Adwa, Ethiopia
Mary Elizabeth Chaffin	Shiloh
James Michael Davis	Pensacola, FL
Ming Tang	Shanghai, People's Republic of China

Degrees Conferred December 16, 1986

George W. Coleman, Jr.	Miami, FL
Tulip Chaudhury	Dhaka, Bangladesh

Degrees Conferred May 9, 1987

Christopher Allen Cantwell	Clemmons
Atron Carl Rowe	Raleigh
Georgette Maria Stark	Fuquay-Varina
Dennis Orlando Williams	Windsor, VA

Mathematics Education

Degree Conferred August 7, 1986

Marilyn Gail Zuckerman	Cary
------------------------------	------

Mechanical Engineering

Degrees Conferred August 7, 1986

James Bernard Gleeson	Syracuse, NY
Floyd Jeffrey Mangum	Charlotte
Nidal Basam Shak'a	Nablus, Palestine

Degrees Conferred December 16, 1986

John Barron Calhoun	Durham
Lester Anderson Foster III	Dundalk, MD
Hakan Ozisik	Raleigh
Michael Adelbert Sullivan	Cincinnati, OH

Degrees Conferred May 9, 1987

Mark William Childers	Orlando, FL
William Charles Hodges	Thomasville
Dan Evans Luttrell	Corryton, TN
Gary Leland Mitchum	Charlotte
Greg Andrew Vanhoy	Kernersville
LeAnn Robbs White	Lincolnton
Moosa Zand	Tehran, Iran

Microbiology

Degree Conferred December 16, 1986

Carmen Laura Vazquez	Manati, Puerto Rico
----------------------------	---------------------

Degrees Conferred May 9, 1987

Michael Christopher Blake	Knoxville, TN
Karen Ann Wood	London, England

Nuclear Engineering

Degree Conferred December 16, 1986

Eric David Sills	Kannapolis
------------------------	------------

Degree Conferred May 9, 1987

Ker-Ming Chin	Taipei, Taiwan, Republic of China
---------------------	-----------------------------------

Nutrition

Degree Conferred May 9, 1987

Jesse Lee Grimes	Scotland Neck
------------------------	---------------

Occupational Education

Degree Conferred May 9, 1987

Betty Jo Bowden McCormac	Southern Pines
--------------------------------	----------------

Operations Research

Degree Conferred August 7, 1986

Jeryl Walter Johnson	King
----------------------------	------

Degrees Conferred December 16, 1986

Jeffrey Carl Dauler	Raleigh
Hadi Boutros El-Khoury	Andrews
Carol Jean Williams Facciolo	Florence, SC
Mircea Scurtu	Raleigh

Degrees Conferred May 9, 1987

Janardanan Kapayur Namboodiri	Bombay, India
Russell Scott Vogtmann	Auburn, MI

Physics

Degrees Conferred August 7, 1986

Melvin Jason Ezell	Dunn
David Wesley Graves	Springdale, AR
Yamina Lansari	Algiers, Algeria
James Daniel Pratt, Jr.	Eden
Alvin Perry Short	Hazard, KY
Craig Douglas Stone	Centralia, IL

Degree Conferred December 16, 1986

Howard Garrelt Lukefahr	Riverside, CA
-------------------------------	---------------

Degrees Conferred May 9, 1987

Anthony Gerard Calamai	Toms River, NJ
Jeanne Ann Jackson-Ford	Enka

Physiology

Degree Conferred August 7, 1986

Mary Lynn Burgess	Raleigh
-------------------------	---------

Degrees Conferred December 16, 1986

Matthew Warren Clark	Greenville
Steven Lee Schindler	Sunbury, PA
Robin Gail Scott	Weatherfield, VT

Degree Conferred May 9, 1987

Dorothy Lynn Murray	Raleigh
---------------------------	---------

Plant Pathology

Degrees Conferred December 16, 1986

Michael Ray Newnam	Elon College
Ocen Modesto Olanya	Kalongo, Uganda
Rebecca Jane Pulliam	Shelbyville, KY

Degree Conferred May 9, 1987

Cynthia Marie Ocamb-Basu	Tecumseh, MI
--------------------------------	--------------

Psychology

Degrees Conferred August 7, 1986

Sandra Lynn Dunham Crocker	Swansboro
Paul Warren Hankey, Jr.	Raleigh

Degrees Conferred December 16, 1986

Elizabeth Watson Pless	Salisbury
Jutta Margarete Doerfler Street	Bad Berneck, West Germany
Patrick Joseph Weis	Peru, IN

Degrees Conferred May 9, 1987

Marjorie Kay King Digh	Cary
Marc Edward Nace	York, PA

Recreation Resources Administration

Degree Conferred May 9, 1987

Mark Cleland Wagstaff Greensboro

Rural Sociology

Degree Conferred May 9, 1987

Linda Newhart Smith Raleigh

Soil Science

Degrees Conferred August 7, 1986

Deliwe Dinah Nkhoma Mzimba, Malawi

Christopher Ward Smith Redondo Beach, CA

Degree Conferred December 16, 1986

Preston Graham Sullivan Meadville, MS

Degrees Conferred May 9, 1987

Sandra Jane Maddox Charlotte

Kevin Charles Martin Hildebran

Textile Chemistry

Degree Conferred August 7, 1986

Cliff Luther Seastrunk III Asheville

Degree Conferred December 16, 1986

Margaret Mary Kehoe Raleigh

Degrees Conferred May 9, 1987

Doreen Gail Hawkinson Minneapolis, MN

Elizabeth Jane Kohout Montford, WI

Cynthia Sweezy Williard Hickory

Textiles

Degrees Conferred August 7, 1986

Elizabeth Carol Gainey Carrere Cary

Mark Ira Farbman Charlotte

Steve Gregory Ward Belmont

Degrees Conferred December 16, 1986

Tetsuya Ashizaki Nagoya, Japan

Ronald Leigh Davis Charlotte

Jeffrey Christian Fulp Winston-Salem

Kay Marie Villa Waukesha, WI

Degrees Conferred May 9, 1987

Ajay Madhusudan Athavale Pune, India

Nathan Brooks Emery Raleigh

Toxicology

Degree Conferred August 7, 1986

Serafino Joseph Franch Richmond Hill, NY

Degree Conferred December 16, 1986

Lisa M. Jeffreys Smith Raleigh

Veterinary Medical Sciences

Degree Conferred December 16, 1986

Jean-Luc Riond Nyon, Switzerland

Degree Conferred May 9, 1987

Stephen Gary Simkins Morrisville

Wood and Paper Science

Degrees Conferred August 7, 1986

Robert Anthony Horry Georgetown, SC

John Harold Talton, Jr. New Bern

Degrees Conferred December 16, 1986

Michael Doyle Boyette Wendell

Medwick Vaughan Byrd, Jr. Benson

Balasubramanian Vasudevan Madras, India

Caifang Yin Beijing, People's Republic of China

Degrees Conferred May 9, 1987

Bornface Wataika Chirwa Lasaka, Zambia

Richard Polk Lehmann, Jr. Monrovia, MD

Balasubramania Panchapakesan Trichy, India

William Harold Petke West Point, VA

Zoology

Degree Conferred August 7, 1986

Joseph Edmond Smith Raleigh

Degrees Conferred December 16, 1986

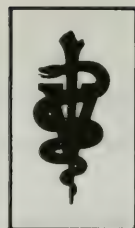
Margaret Anne Horner Durham

Daniel Gregory LaPasha Baltimore, MD

Degree Conferred May 9, 1987

Deborah Anne Bodolus Pottstown, PA

DOCTOR OF VETERINARY MEDICINE



SCHOOL OF VETERINARY MEDICINE

Degrees Conferred May 9, 1987

Sandra Hoet Albright	Raleigh
Kenneth Lewis Bacon	Hendersonville
Mark Edward Blakley	Raleigh
Jerry Michael Boles	High Point
Lynn Jones Bowden	Salisbury
Robin Nannette Brock	Mocksville
Karen Dale Brooks	Raleigh
Virginia Lee Autry Brown	Angier
Barbara Ann Butler	Raleigh
Mark Steven Camacho	Raleigh
John Michael Canipe	Fayetteville
James Maston Chambers III	Raleigh
Deborah Ann Clark	Raleigh
Victoria Lynn Clyde	Cary
Gillian Anne Comyn	Mill Spring
Lisa Mary Confessore	Raleigh
Roy Douglas Cope, Jr.	Cary
Elizabeth Sutton Cotton	Greensboro
William Kent Dean	Hope Mills
Edward Brian Delp	Raleigh
Mary Louise East	Charlotte
Margaret Ann Edwards	Raleigh
Mary Catherine Fondren	Roanoke Rapids
Ronald Barthold Gaeta	Southern Pines
Jeanne Susan Grim	Raleigh
Peter Louis Hecht	Raleigh
Karen Joanna Heller	Wilmington
Scott Roderick Helms	Morganton
Thomas Marshall Hemstreet	Raleigh
Pamela Jones Hendrickson	Raleigh
Julia Marie Hix	Gibsonville
Hilda Raye Holcombe	Raleigh
Erika Klopfer Honoré	Durham
Patricia Anne Howland	Morehead City
Sherry Denise Huskey	Rutherfordton
Joseph Linwood Jernigan	Whiteville
Jocelyn Dee Johnsrude	Cary
Mark Timothy Ketner	Clemmons
Cynthia Anne Kimbrell	Raleigh
Linda Sue Kinney	Lexington
Karlene Everson Lannon	Morrisville
Sara Helene Lash	Charlotte
Mary Anne Leslie	Greenville
James Harvey Lilley	Raleigh
Stuart Michael McCall	Marion
Jacquelyn Dianne McCracken	Raleigh
Thomas Jerome McGinn III	Greensboro
Lori Ann Meacham	Kannapolis
Karen Carter Miller	Charlotte

Sheri Mulligan Nutter	Hillsborough
Betsy Jeanne Pethick	New Hill
Lynn Alton Reed	Cary
Randall Paul Reynolds	Raleigh
Cara Jane Roten	Boone
Cindy Patterson Rowe	Taylorsville
David Ben Schauer	Raleigh
Kimberly Ann Smith	Mooreville
Ida Washington Smoak	Cary
Mary Catherine Snyder	Morganton
Martha Elizabeth Stebbins	Raleigh
Darrel Keith Styles	Burnsville
Toni Lee Sugg	Snow Hill
Sonya Powell Swing	Warsaw
John Dawson Sykes	Rocky Mount
Martha Nees Teeter	New Hill
Sue Jordan Thomas	Greensboro
Jimmy Lee Tickel	Roanoke Rapids
Donna Lee Warren	Charlotte

Doctor of Education Degrees

Degrees Conferred August 7, 1986

Frank McNutt Clamon, Jr., Occupational Education
Kingsport, Tennessee

Dissertation: Competencies Needed for Entry-level Positions as Computer Programmers or Programmer/Analysts in Tennessee Manufacturing Industries. (Under the direction of Joseph R. Clary.)

Ernst Tito Craige, Curriculum and Instruction
Raleigh, North Carolina

Dissertation: The Education of the Boat People: Background, Adaptations and Aspirations of North Carolina's Haitian Farmworkers. (Under the direction of John F. Arnold and Arlene Fingeret.)

Robert Day Elliott, Jr., Adult and Community College Education
Durham, North Carolina

Dissertation: The Influence of a Participative Teaching Method on Adult Learners' Attitudes and Self-concepts. (Under the direction of J. Conrad Glass, Jr.)

Ralph Junken Johnston, Jr., Industrial Arts Education
Kannapolis, North Carolina

Dissertation: A Comparative Analysis between the Effectiveness of Conventional and Modular Instruction in Teaching Students with Varied Learning Styles and Individual Differences, Enrolled in High School Industrial Arts Manufacturing. (Under the direction of Walter L. Cox, Jr. and Richard E. Peterson.)

Ruth Mann Patterson, Occupational Education
Concord, North Carolina

Dissertation: Continuing Education Needs Perceived by Members of Three North Carolina Allied Health Professions. (Under the direction of Judith A. Davis and Joseph R. Clary.)

Degrees Conferred May 9, 1987

Delmar Wayne Bachert, Adult and Community College Education
Delano, Pennsylvania

Dissertation: The NOLS Experience: Experiential Education in the Wilderness. (Under the direction of Arlene Fingeret.)

Kendall Curfman Beavers III, Occupational Education
Zebulon, North Carolina

Dissertation: Job Satisfaction of North Carolina Vocational Agricultural Teachers. (Under the direction of Larry R. Jewell and Barbara J. Malpiedi.)

- William Edward Dail, Adult and Community College Education
Newport, North Carolina
- Dissertation: Identification and Analysis of Personal Productivity Competencies Applicable to First-level Supervisors in a Federal Military Installation. (Under the direction of Ronald W. Shearon.)
- Sandra Alberg Dellinger, Adult and Community College Education
Raleigh, North Carolina
- Dissertation: The Effect of a Nonformal Energy Education Program on Behavioral Change in Selected North Carolina Residents. (Under the direction of Edgar J. Boone.)
- Janis Yvonne Dunlap, Adult and Community College Education
Gustine, California
- Dissertation: Perspectives of American Human Resource Managers and Trainers in Japanese Owned and Managed Companies in the United States. (Under the direction of Arlene Fingeret.)
- Louise Harlow Hessenflow, Adult and Community College Education
Burke, Virginia
- Dissertation: Factors Associated with North Carolina Legislators' Perception of the North Carolina Community College System, 1985. (Under the direction of Edgar J. Boone.)
- David McLawhorn, Occupational Education
Wilson, North Carolina
- Dissertation: The Effect of Selected Variables on the Educational Orientation of Technical and Vocational Instructors in the North Carolina Community College System. (Under the direction of Larry R. Jewell and Judith A. Davis.)
- Carol Lehman Osman, Educational Administration and Supervision
Cary, North Carolina
- Dissertation: Nursing Students' Perceptions of Nurse Role Models and Effective Role Model Characteristics in Nursing Faculty. (Under the direction of Bruce G. Beezer.)
- Pamela Overstreet Paisley, Guidance and Personnel Services
Red Springs, North Carolina
- Dissertation: The Developmental Effects of a Staff Development Program for Beginning Teachers. (Under the direction of Don C. Locke.)
- Robert Thomas Paisley, Guidance and Personnel Services
McLeansville, North Carolina
- Dissertation: A Cognitive Developmental Dilemma Based Model for Substance Abuse Prevention. (Under the direction of Edwin R. Gerler.)

Betsy Rodwell Smith, Adult and Community College Education

Raleigh, North Carolina

Dissertation: The Effect of Interaction Management Training on Supervisory Behavior Change in the North Carolina Department of Human Resources. (Under the direction of Edgar J. Boone and R. David Mustian.)

Paul Frank Vandergrift, Adult and Community College Education

Raleigh, North Carolina

Dissertation: Use of Telecommunications as a Teaching Strategy: Perceptions Held by Top Administrators in Institutions of the North Carolina Community College System, 1987. (Under the direction of Edgar J. Boone.)

Mary Jacobs Whitmore, Adult and Community College Education

Durham, North Carolina

Dissertation: Representativeness and Effectiveness of County Extension Advisory Councils in North Carolina. (Under the direction of Richard T. Liles and R. David Mustian.)

Doctor of Philosophy Degrees

Degrees Conferred August 7, 1986

- Jeffrey Dyer Armstrong, Physiology
Kuttawa, Kentucky
Dissertation: Season, Suckling and Nutrition Alter Ovarian Function in Swine through Control of Gonadotropin-releasing Hormone. (Under the direction of Jack H. Britt.)
- John Lewis Ayres, Chemical Engineering
Bethel, North Carolina
Dissertation: Metal Ion Removal on a Precoated, Reticulated Vitreous Carbon Electrode. (Under the direction of Peter S. Fedkiw.)
- Kyoo-Sik Bae, Materials Science and Engineering
Seoul, Korea
Dissertation: Mechanisms of Fatigue in AISI 304 and 316 Stainless Steels under Viscous Oil Environments, Including a Coal Process Solvent. (Under the direction of Hans Conrad.)
- Maurizio Benassi, Mathematics
Busseto, Parma, Italy
Dissertation: Parallel Algorithms for the Solution of Variational Inequalities. (Under the direction of Robert E. White.)
- Robert Newton Bicknell, Physics
Homer City, Pennsylvania
Dissertation: Epitaxial Growth of Thin Films and Quantum Well Structures of Cadmium Telluride by Molecular Beam Epitaxy. (Under the direction of Jan F. Schetzina.)
- Richard Rue Bounds, Botany
Salisbury, Maryland
Dissertation: Systematic Studies of *Rhexia* L. (Melastomataceae). (Under the direction of Robert L. Beckmann.)
- James Arthur Cherry, Zoology
Kensington, Maryland
Dissertation: Ontogeny and Function of Ultrasonic Vocalization during the Sexual Behavior of Golden Hamsters (*Mesocricetus auratus*). (Under the direction of John G. Vandenberg.)
- Jose Euripedes da Silva, Soil Science
Brasilia, D.F., Brazil
Dissertation: Hydrothermally Treated Potassium Feldspar as a Source of Potassium to Plants. (Under the direction of Sterling B. Weed.)
- Fong-Yuen Ding, Industrial Engineering
Taichung, Taiwan, Republic of China
Dissertation: Solving a Multi-stage Stochastic Production/Inventory Problem Using Markov Decision Process Methodologies. (Under the direction of Thom J. Hodgson.)

- Anna Gergel Edwards, Chemistry
Raleigh, North Carolina
Dissertation: Tandem Flames as a Source in Atomic Spectrometry.
(Under the direction of Charles B. Boss.)
- Steven Howard Everhart, Zoology
Wilmington, North Carolina
Dissertation: Avian Interspecific Utilization of Red-cockaded Wood-
pecker Cavities. (Under the direction of Phillip D. Doerr.)
- Stephen Cecil Ewing, Biomathematics (Degree granted
posthumously)
Raleigh, North Carolina
Dissertation: Application of the Lotka-Volterra Dynamical Equations to
Natural Populations. (Under the direction of Don L. Ridgeway.)
- Gregory Edward Garcia, Biochemistry
Fullerton, California
Dissertation: Isolation of Porcine Hepatic Ornithine Transcarbamylase
mRNA: In vitro Translation and Cloning of cDNA. (Under
the direction of Evan E. Jones.)
- Mohan Gawande, Operations Research
Gwalior, M.P., India
Dissertation: Projection Algorithms for Specially Structured Constrained
Minimization Problems. (Under the direction of Joseph C.
Dunn.)
- Jeffery Scott Gentry, Chemistry
Winston-Salem, North Carolina
Dissertation: Analyte Transport and Excitation in Direct Current Plasma
Atomic Emission Spectrometry. (Under the direction of
Charles B. Boss.)
- Calvin Levester Green, Jr., Civil Engineering
Darlington, South Carolina
Dissertation: The Influence of a Freshwater Riverine Marsh for Tertiary
Wastewater Treatment in the Upper Basin of the B. Everett
Jordan Reservoir. (Under the direction of William S. Galler.)
- Kazuo Hiraizumi, Genetics
Austin, Texas
Dissertation: Genetic Characterization and Adaptive Significance of Di-
peptidase Variation in *Drosophila melanogaster*. (Under
the direction of Cathy C. Laurie-Ahlberg and C. Clark
Cockerham.)
- Melinda Gay Hollingshead, Veterinary Medical Sciences
Huntsville, Alabama
Dissertation: The Mucosal Immune Response of Swine and Its Relation-
ship to Infection with an Enteric Coronavirus. (Under the
direction of Edward V. DeBuysscher.)
- Bruce Robert Jaeger, Psychology
Colorado Springs, Colorado
Dissertation: The Effects of Local Exertion and Anticipation on the Per-
formance of a Discrete Skill. (Under the direction of Richard
G. Pearson.)

- Willy Kalt-Torres, Botany
Gibson, North Carolina
- Dissertation: Biochemical Regulation of Sucrose Formation in Relation to Carbon Assimilation and Partitioning in *Zea mays* L. (Under the direction of Steven C. Huber.)
- Stephan Alan Kiefer, Psychology
Raleigh, North Carolina
- Dissertation: An Examination of Alternate Explanations of the Specific Distance Tendency. (Under the direction of Donald H. Mershon.)
- Sangwook Kim, Materials Science and Engineering
Seoul, Korea
- Dissertation: The Relationships between Chemical Composition, Microstructure and Corrosion Properties in Molybdenum Ion Implanted Aluminum. (Under the direction of Ray B. Benson, Jr.)
- Seuk-Buom Kim, Materials Science and Engineering
Chapel Hill, North Carolina
- Dissertation: Multi-axial Failure Criteria in Fiber Composites and Their Application to the Through-thickness Strength of Hybrid Fiber Laminates. (Under the direction of Abdel-Aziz Fahmy.)
- Elke Endert Kirkpatrick, Plant Pathology
Cologne, West Germany
- Dissertation: Biology and Ecology of *Cytospora cincta* Sacc. on Peach [*Prunus persica*(L.) Batsch]. (Under the direction of David F. Ritchie and Kurt J. Leonard.)
- Jeanne Burwell Koger, Biochemistry
Greensboro, North Carolina
- Dissertation: Purification and Structural Analysis of Ornithine Transcarbamylase from Porcine Liver. (Under the direction of Evan E. Jones.)
- Richard Thomas Lamar, Forestry
Kensington, Maryland
- Dissertation: Comparative Effectivity of Three Green Ash (*Fraxinus pensylvanica* Marsh.) Vesicular-Arbuscular Mycorrhizal Fungi. (Under the direction of Charles B. Davey.)
- Soo Kar Leow, Operations Research
Kuala Lumpur, Malaysia
- Dissertation: Heuristic and Optimal Assignments of Redundant Software Versions and Processors in Fault-tolerant Computer Systems for Maximum Reliability. (Under the direction of David F. McAllister.)
- Xiu-Ding Lin, Mathematics
Fuzhou, People's Republic of China
- Dissertation: Minimal Polynomials of Derivations of Prime Rings. (Under the direction of Jiang Luh.)

- Luciano Lisboa, Jr., Forestry
Sao Paulo, S.P., Brazil
- Dissertation: Effects of NPK-Fertilizer on Growth and Frost Resistance of *Eucalyptus viminalis* Labill. Seedlings. (Under the direction of Russ Lea.)
- Mohammad Fatchurachim Masyhudi, Crop Science
Bumiayu, Brebes, Indonesia
- Dissertation: Nitrogen Utilization by Soybeans as Influenced by Water Deficit. (Under the direction of Robert P. Patterson.)
- Gail Lynn Matters, Genetics
Morris Plains, New Jersey
- Dissertation: Influence of Environmentally Induced Oxidative Stress on the Expression of Catalase and Superoxide Dismutase Genes in *Zea mays* L. (Under the direction of John G. Scandalios.)
- Robert Raymond Milks, Horticultural Science
Sarasota, Florida
- Dissertation: Culture and Water Relations of *Pelargonium x hortorum* Bailey 'Ringo Scarlet' as Seedlings Established with Limited Root Volumes. (Under the direction of Roy A. Larson.)
- Robert Talmadge Neece, Electrical and Computer Engineering
Raleigh, North Carolina
- Dissertation: Material and Optical Effects on IMPATT Diode Operation. (Under the direction of Robert J. Trew.)
- Walter Paul Pawlowski, Fiber and Polymer Science
Weymouth, Massachusetts
- Dissertation: The Synthesis and Liquid Crystalline Properties of Selected Cellulose Derivatives. (Under the direction of Raymond E. Fornes and Richard D. Gilbert.)
- Gopal B. Reddy, Mechanical Engineering
Chapel Hill, North Carolina
- Dissertation: Heat and Mass Transfer in Unsaturated Porous Materials: An Application to Soil. (Under the direction of James C. Mulligan.)
- Kurt Edmond Richardson, Toxicology
Jacksonville, North Carolina
- Dissertation: Dose-Response Relationships of Aflatoxin and Preparation of *Fusarium* Mycotoxins. (Under the direction of Pat B. Hamilton.)
- Nora Isabel Rivaud, Zoology
Rochester, New York
- Dissertation: Light and Electron Microscopic Study of the Nuclear and Cytoplasmic Changes Concurrent with Encystation and Division in the Apostome Ciliate *Hyalophysa chattoni*. (Under the direction of Phyllis Clarke Bradbury.)
- Jae-Seok Ryu, Materials Science and Engineering
Seoul, Korea
- Dissertation: Ion Implantation, Annealing, Characterization and Device Development in Beta-Silicon Carbide Single Crystalline Thin Films. (Under the direction of Robert F. Davis.)

Larry Ray Steenson, Food Science
 Raleigh, North Carolina
 Dissertation: Natural and Acquired Plasmid-encoded Bacteriophage Resistance and Physical Protection from Lytic Bacteriophage in Group N Streptococci. (Under the direction of Todd R. Klaenhammer.)

Achmad Suryana, Economics
 Bogor, Jawa Barat, Indonesia
 Dissertation: Trade Prospects of Indonesian Palm Oil in the International Markets for Fat and Oils. (Under the direction of Richard A. King and Thomas J. Grennes.)

Stuart Lynn Warren, Horticultural Science
 Fairfield, Illinois
 Dissertation: Plantation Management: Its Influence on Soil Fertility, Herbaceous Vegetation and Growth of Fraser Fir and Norway Spruce. (Under the direction of Walter A. Skroch and Thomas J. Monaco.)

Claire Grace Williams, Forestry
 Pinebluff, North Carolina
 Dissertation: Early Genetic Testing for Loblolly Pine (*Pinus taeda* L.) Growth Traits. (Under the direction of Robert J. Weir.)

Beile Yin, Civil Engineering
 Shanghai, People's Republic of China
 Dissertation: Wave Force on a Horizontal Member. (Under the direction of Chi C. Tung.)

Degrees Conferred December 16, 1986

Nouman Abdul Majeed Ali, Civil Engineering
 Baghdad, Iraq
 Dissertation: Use of Deflection Basins for Structural Evaluation of Flexible Pavements. (Under the direction of John W. Horn and N. Paul Khosla.)

Richard Frank Allison, Plant Pathology
 Alliance, Ohio
 Dissertation: Nucleotide Sequence of the Tobacco Etch Virus Genome: Evidence for the Translation of a Single Polypeptide. (Under the direction of Guy V. Gooding, Jr. and William G. Dougherty.)

Fathi Kamel Amoura, Electrical Engineering
 Raleigh, North Carolina
 Dissertation: Distribution Power Line Carrier Analysis Using the Bus Impedance Approach. (Under the direction of J. Benjamin O'Neal, Jr.)

Jose Lastimosa Bacusmo, Horticultural Science
 Pasay City, Philippines
 Dissertation: Stability Studies on Sweet Potato. (Under the direction of Wanda W. Collins.)

- Nikolaos Evangelos Buris, Electrical Engineering
Athens, Greece
- Dissertation: Magnetostatic Wave Propagation in Inhomogeneous and Antitropic Ferrite Thin Films. (Under the direction of Daniel D. Stancil and J. Frank Kauffman.)
- Jose Emilson Cardoso, Plant Pathology
Fortaleza, Ceara, Brazil
- Dissertation: Biological Control of Rhizoctonia Root Rot of Bean with Binucleate *Rhizoctonia*-like Fungi. (Under the direction of Eddie Echandi.)
- Cathy Sue Carlson, Veterinary Medical Sciences
Moorhead, Minnesota
- Dissertation: Osteochondrosis of the Articular-Epiphyseal Complex in Swine. (Under the direction of Harvey D. Hilley and Donald J. Meuten.)
- David Frederick Champion, Psychology
Raleigh, North Carolina
- Dissertation: Some Effects of Combinations of Noise and Vibration on the Performance of a Cognitive Task. (Under the direction of Richard G. Pearson.)
- Mark Christopher Conner, Zoology
Jacksonville, Florida
- Dissertation: Refinement of the Change-in Ratio Technique for Estimating Abundance of White-tailed Deer. (Under the direction of Richard A. Lancia.)
- Julia Lea Cook, Genetics
Orlando, Florida
- Dissertation: Cloning and Sequence Analysis of the Glycerol-3-Phosphate Dehydrogenase Gene of *Drosophila melanogaster*: Generation of C-Terminal Protein Subunit Heterogeneity of Alternative hnRNA Processing. (Under the direction of Glenn C. Bewley.)
- Alan Edward Cowart, Electrical Engineering
Charleston, South Carolina
- Dissertation: The Detection of Unresolved Targets in Sequential Imagery Using the Hough Transform. (Under the direction of Wesley E. Snyder.)
- Michael Wesley Cunningham, Forestry
Oklahoma City, Oklahoma
- Dissertation: Evaluation of the Potential of Clonal Forestry for a Population of American Sycamore. (Under the direction of Robert C. Kellison.)
- Ampon Dhamacharoen, Applied Mathematics
Chonburi, Thailand
- Dissertation: Positive Discrete Linear Control Systems with Bounded Inputs and Graded Manpower Systems. (Under the direction of Nicholas J. Rose.)

- Hariyatno Dwiprabowo, Operations Research
Bogor, Indonesia
- Dissertation: A Study of Multiple Objective Optimization for Multi-use Management in Even-aged Forests. (Under the direction of Thomas W. Reiland and Hugh A. Devine.)
- Alireza Farid Faryar, Electrical Engineering
Tehran, Iran
- Dissertation: Discrete Signal Reconstruction from Partial Knowledge in Two Coordinate Systems. (Under the direction of Sarah A. Rajala.)
- Vicente Fretes Cibils, Economics
Resistencia-Chaco, Argentina
- Dissertation: The Analysis of Foreign Sector Shocks in a General Equilibrium Econometric Model: The Case of a Small Open Economy. (Under the direction of Paul J. Johnson and Thomas J. Grennes.)
- Lilyan Estela Fulginiti, Economics
Resistencia-Chaco, Argentina
- Dissertation: Argentine Agricultural Policies in a Multiple Output Multiple Input Framework. (Under the direction of Paul R. Johnson and Richard K. Perrin.)
- Bryan Jay Gentsch, Crop Science
Belleville, Illinois
- Dissertation: Efficacy, Behavior and Fate of Bromoxynil and Photosynthetic Electron Transport Inhibition by Bromoxynil Following Application in Overhead Irrigation Water. (Under the direction of Jerome B. Weber.)
- David Eugene Glass, Mechanical Engineering
Charlotte, North Carolina
- Dissertation: A Numerical Study of Hyperbolic Heat Conduction Problems. (Under the direction of Mehmet N. Ozisik.)
- Ricardo Jose Goenaga, Crop Science
San Juan, Puerto Rico
- Dissertation: Mobilization of Nitrogen in Tobacco during Field Growth and Senescence. (Under the direction of Raymond C. Long and Richard J. Volk.)
- Robert Carlin Graham, Soil Science
Oakdale, California
- Dissertation: Geomorphology, Mineral Weathering and Pedogenesis in an Area of the Blue Ridge Front, North Carolina. (Under the direction of Stanley W. Buol.)
- Jacqueline Ann Gray, Physiology
West Hartford, Connecticut
- Dissertation: Diuretic Agents as Probes of Renal Development and Nephrotoxicity in the Neonatal Rat. (Under the direction of John F. Roberts.)
- John Morton Hagan III, Zoology
Franklin, Virginia
- Dissertation: Colonial Nesting in Ospreys. (Under the direction of Jeffrey R. Walters and Phillip D. Doerr.)

- Kathleen Galante Haynes, Horticultural Science
Raleigh, North Carolina
- Dissertation: Heritability of High Dry Matter Performance of Diploid Potatoes under High Temperature Growing Conditions. (Under the direction of Warren R. Henderson.)
- Mark H. Headinger, Chemical Engineering
Greensboro, North Carolina
- Dissertation: Modeling of a Landfill-Gas Purification Process. (Under the direction of Ronald W. Rousseau and James K. Ferrell.)
- Michael Kevin Hennessey, Entomology
Pennsville, New Jersey
- Dissertation: Systematics of Species of Free-living, Edaphic Gamasine Mites (Acari: Mesostigmata) of North America. Part I. Revision of Thirty Species Described by Early Acarologists. Part II. The Family Parasitidae Inhabiting Forest Soils of North and South Carolina. (Under the direction of Maurice H. Farrier and Lewis L. Deitz.)
- David Martin Hitch, Chemical Engineering
Atlanta, Georgia
- Dissertation: Numerical Simulation of Continuous-contact Separation Processes. (Under the direction of Ronald W. Rousseau.)
- Gary Ray Hodge, Forestry
Virginia Beach, Virginia
- Dissertation: Cold Hardiness in Loblolly Pine: Artificial Screening and Physiological Mechanisms. (Under the direction of Robert J. Weir.)
- Randall Newton Holley, Crop Science
Coral Gables, Florida
- Dissertation: Potential Use of Tropical Hybrid Maize Derivatives. (Under the direction of Major M. Goodman.)
- Joel Ramsey Howard, Forestry
Syracuse, New York
- Dissertation: Predicting Productivity for Prospective Upper Coastal Plain Hardwood Plantation Sites as a Function of Chemical and Physical Site Factors. (Under the direction of Robert C. Kellison.)
- YoungHo Jin, Nuclear Engineering
Pusan, Korea
- Dissertation: Monte Carlo Simulation of the Complete Spectral Response of Prompt Gamma Ray Analysis Systems. (Under the direction of Robin P. Gardner.)
- Chang Whan Joo, Fiber and Polymer Science
Seoul, Korea
- Dissertation: An Investigation of the Performance of a Core-type Friction Spinning Machine and the Products Made Therefrom. (Under the direction of Peter R. Lord.)

- Robert Bart Killam, Statistics
Raleigh, North Carolina
- Dissertation: The Distribution of the Maximum of a Nonstationary Dependent Normal Sequence with Applications to SO₂ Air Pollution Regulations. (Under the direction of Bibhuti B. Bhattacharyya.)
- Kai-Yung Lay, Materials Science and Engineering
Taichung, Taiwan, Republic of China
- Dissertation: The Growth and Characterization of CdTe-based II-VI Alloys. (Under the direction of Klaus J. Bachmann and Hans H. Stadelmaier.)
- James Palmer Lewis, Psychology
Troutman, North Carolina
- Dissertation: The Relationship between Supervisors' Attributions for the Causes of Employee Performance and Supervisors' Structuring and Consideration Behavior. (Under the direction of Howard G. Miller.)
- Craig Lee McFadden, Psychology
Goldsboro, North Carolina
- Dissertation: The Discovery Kindergarten Program: The Effectiveness of an Alternate Kindergarten Program for Developmentally Delayed Children. (Under the direction of Patricia F. Horan and N. William Walker.)
- Brent Andrew McKee, Marine, Earth and Atmospheric Sciences
Seagrove, North Carolina
- Dissertation: The Fate of Particle-reactive Radionuclides on the Amazon and Yangtze Continental Shelves. (Under the direction of David J. DeMaster and Charles A. Nittrouer.)
- Edgardo Jose Monteverde-Penso, Crop Science
Caracas, Venezuela
- Dissertation: Recurrent Selection for Fruit Yield in Peanut. (Under the direction of Johnny C. Wynne.)
- Jamil Muhammad Ali Nazer, Food Science
Jeddah, Saudi Arabia
- Dissertation: A Model Integrated Analytical System for the Characterization and Differentiation of Edible Oils. (Under the direction of Clyde T. Young.)
- Dirk Joo Oh, Nuclear Engineering
Daejeon-Si, Korea
- Dissertation: Computer Experiments on Isolated Frenkel Pair Productions in HCP Titanium. (Under the direction of K. Linga Murty and Joe R. Beeler, Jr.)
- Volkan Husnu Olguz, Electrical Engineering
Istanbul, Turkey
- Dissertation: Bipolar Transistors with Ion Implanted, Rapid Thermal Annealed Base and Semi-insulating Polycrystalline Silicon Emitter. (Under the direction of Jimmie J. Wortman.)

- Athanasios George Papathanasiou, Aerospace Engineering
Athens, Greece
- Dissertation: Boundary Layer Control by Acoustic Means. (Under the direction of Robert T. Nagel and Thomas H. Hodgson.)
- Young Hwan Park, Fiber and Polymer Science
Seoul, Korea
- Dissertation: Synthesis and Characterization of Ethylene-Propylene Block Copolymers. (Under the direction of Richard D. Gilbert.)
- Arturo Jose Salazar, Food Science
Maracaibo, Venezuela
- Dissertation: The Role of Boron on Peanut Flavor and Chemical Composition. (Under the direction of Clyde T. Young.)
- Teresa Linnea Scheid-Cook, Sociology
Marcellus, New York
- Dissertation: Ritual Conformity and Loose-coupling in the Organization of Outpatient Commitment. (Under the direction of L. Richard Della Fave.)
- Roy W. Silcox, Physiology
Riverton, Utah
- Dissertation: Culture of the Porcine Isolated Embryonic Disc *in Vitro*. (Under the direction of Bryan H. Johnson.)
- Helen Kluttz Smith, Chemistry
Landis, North Carolina
- Dissertation: Applications of Computer Modeling to Chromatography. (Under the direction of William L. Switzer.)
- Sara Womack Smith, Psychology
Goldsboro, North Carolina
- Dissertation: An Analysis of the Predictive Validity of the Development Indicators for the Assessment of Learning-Revised (DIAL-R). (Under the direction of Rachel F. Rawls and Patricia F. Horan.)
- Pauline Carolyn Spaine, Botany
Baltimore, Maryland
- Dissertation: The Development and Application of an ELISA for Fusiform Rust Disease Resistance Screening *in Vitro* in Loblolly Pine Seedlings. (Under the direction of Henry V. Amerson and Roger C. Fites.)
- Susan Carole Jenkins Sumner, Chemistry
Gastonia, North Carolina
- Dissertation: Solid State and Solution ^{13}C NMR on the Conformational Analysis of Methadone Hydrochloride and Related Narcotic Analgesics. (Under the direction of Charles G. Moreland and Thomas C. Caves.)
- Robert Henry Teyker, Genetics and Soil Science
West Long Branch, New Jersey
- Dissertation: Genetic Factors in Nitrate Uptake and N Utilization in *Zea mays* L. (Under the direction of Robert H. Moll and William A. Jackson.)

- Michael Albert Tischler, Electrical Engineering
Durham, New Hampshire
Dissertation: Atomic Layer Epitaxy of III-V Compound Semiconductors. (Under the direction of Nino A. Masnari and Salah M. Bedair.)
- Paula Ruth Trumbo, Biochemistry
Hilton Head Island, South Carolina
Dissertation: Studies on the Mechanism of the Toxicity of Palmitoyl Glycerol. (Under the direction of Samuel B. Tove.)
- Richard Woosley Waggoner, Jr., Chemistry
Walkertown, North Carolina
Dissertation: Self-correction Algorithms Applied to Hierarchical Pattern Recognition Classifications of Liquid Monosubstituted Benzenes. (Under the direction of William L. Switzer.)
- David Atlee Ward, Physics
Spruce Pine, North Carolina
Dissertation: Integral Equation Study of Molecular Fluids and Liquid Crystals in Two Dimensions. (Under the direction of Fred Lado.)
- Susan Phoebe Whitney, Entomology
Vienna, Ohio
Dissertation: Dispersal and Host Preference of Woodland Sharpnosed Leafhoppers, *Scaphytopius magdalensis* (Provancher) and *S. verecundus* (Van Duzee) in Relation to Spread of Blueberry Stunt Disease. (Under the direction of John R. Meyer and George C. Rock.)
- Abdelfatah Mohammed Yacout, Nuclear Engineering
Raleigh, North Carolina
Dissertation: Monte Carlo Simulation of the X-ray Fluorescence Spectra from Multielement Homogeneous and Heterogeneous Samples. (Under the direction of Robin P. Gardner and Kuruvilla Verghese.)
- Ho-Ke Yin, Electrical Engineering
Kaohsiung, Taiwan, Republic of China
Dissertation: Feeder Reconfiguration in Electric Distribution Systems. (Under the direction of John J. Grainger.)
- Abla Mahmoud Zayed, Materials Science and Engineering
Giza, Egypt
Dissertation: Factors Governing Local Necking in A1 Sheet and Associated Dislocation. (Under the direction of Hans Conrad.)

Degrees Conferred May 9, 1987

- Abdul Latif Ahmadzabidi, Entomology
Parit, Perak, Malaysia
Dissertation: The Influence of a Water + Soybean Oil Carrier on Performance of Three Insecticides on Soybeans. (Under the direction of Julius R. Bradley, Jr. and John W. Van Duyn.)

- Marilyn Ruth Allis, Psychology
Raleigh, North Carolina
Dissertation: Assessment of Level of Ego Development: Construction of an Instrument. (Under the direction of Samuel S. Snyder.)
- Steven Anderson, Forestry
Stillwater, Oklahoma
Dissertation: The Economics of Early Cultural Treatments in Loblolly Pine Plantations. (Under the direction of D. Lester Holley, Jr.)
- James Edward Andrews, Toxicology
Hendersonville, North Carolina
Dissertation: The Effects of Hexachlorobenzene (HCB) on the Calcium Homeostatic Mechanism and Bone Development in Fischer 344 Rats. (Under the direction of William E. Donaldson.)
- Lynn Goodwin Bagley, Physiology
Moroni, Utah
Dissertation: Embryonic Respiration and Hatchability of Turkey Eggs. (Under the direction of Vern L. Christensen and J. Paul Thaxton.)
- Robert Glen Best, Genetics and Toxicology
Columbia, South Carolina
Dissertation: Evaluation and Interpretation of Sister Chromatid Exchange Induction near the Baseline. (Under the direction of Ernest Hodgson and Wendell H. McKenzie.)
- Richard Lee Blakley, Chemistry
Winston-Salem, North Carolina
Dissertation: Luminescence Studies of Mixed Ligand Transition Metal Complexes. (Under the direction of M. Keith DeArmond.)
- Allan Albert Bloom, Psychology
Lynn, Massachusetts
Dissertation: The Bender Gestalt Test as a Method of Identifying Emotionally Handicapped Elementary School Children. (Under the direction of Patricia F. Horman.)
- Meta Jeanette Bonner, Zoology
Greensboro, North Carolina
Dissertation: Effects of Prenatal Phenobarbital Exposure on the Behavior and Reproductive Development of Golden Hamsters. (Under the direction of John G. Vandenbergh.)
- Martin Randolph Botkin, Forestry
Mount Airy, North Carolina
Dissertation: The Forest Planning Model and Outdoor Recreation Resource Allocation. (Under the direction of Hugh A. Devine.)
- Sally Morgan Brower, Psychology
Simpsonville, South Carolina
Dissertation: Effect of the Family Environment on the Social Adjustment of Adult Children of Alcoholics. (Under the direction of Donald W. Drewes.)

- Bradford Alden Burns, Chemistry
Raleigh, North Carolina
- Dissertation: Effects of Coupling Efficiency on Atomic Spectrometry with a Microwave Induced Plasma. (Under the direction of Charles B. Boss.)
- Frank Calogero, Fiber and Polymer Science
Philadelphia, Pennsylvania
- Dissertation: Designer Dyes: A Systematic Approach to the Development of Nonmutagenic Replacements for Benzidine in the Preparation of Disazo Dyes. (Under the direction of Charles D. Livengood and Louis A. Jones.)
- James John Camberato, Soil Science
Scarborough, New York
- Dissertation: The Effects of Nitrogen and Plant Density on the Growth and Development of Prolific Corn. (Under the direction of Eugene J. Kamprath.)
- Albert Cowardin Capehart, Jr., Psychology
Richmond, Virginia
- Dissertation: The Effects of Income Ordering upon the Self-esteem and Locus of Control of 19- to 25-year-olds. (Under the direction of Donald W. Drewes.)
- John Thomas Carroll III, Mechanical Engineering
Columbus, Indiana
- Dissertation: A Numerical and Experimental Study of Single Point Diamond Machining. (Under the direction of John S. Strenkowski.)
- Sopa Chevacharoenkul, Materials Science and Engineering
Phuket, Thailand
- Dissertation: Kinetics and Mechanisms of Intermediate- and High-temperature Creep in Niobium Carbide Single Crystals. (Under the direction of Robert F. Davis.)
- Han-Kwon Choi, Nuclear Engineering
Seoul, Korea
- Dissertation: Monte Carlo Simulation of the Temporal and Spectral Responses of the Pulsed Neutron Logging Principle. (Under the direction of Robin P. Gardner and Kuruvilla Verghese.)
- John Stephen Clark, Economics
Guelph, Ontario, Canada
- Dissertation: A Dynamic, Multiproduct Model of Agricultural Supply. (Under the direction of Gerald A. Carlson.)
- Scott Allen Comes, Nuclear Engineering
Raleigh, North Carolina
- Dissertation: Out-of-core Nuclear Fuel Cycle Economic Optimization for Nonequilibrium Cycles. (Under the direction of Paul J. Turinsky.)
- Larry Leon Cook, Toxicology
Winter Haven, Florida
- Dissertation: Analysis of Chlordecone-induced Hypothermia in the Rat. (Under the direction of Frank W. Edens and William E. Donaldson.)

- Wilton Pierce Cook, Horticultural Science
Charleston, South Carolina
- Dissertation: Nitrogen Source, Placement and Application Frequency for Tomatoes Grown with Drip Irrigation and Plastic Mulch. (Under the direction of Douglas C. Sanders and Frank L. Haynes.)
- Thomas Edford Cousins, Civil Engineering
Raleigh, North Carolina
- Dissertation: Bond of Epoxy Coated Prestressing Strand. (Under the direction of David W. Johnston and Paul Z. Zia.)
- Christopher Bruce Craft, Soil Science
Greensboro, North Carolina
- Dissertation: Sources, Accumulation and Tidal Exchange of Nitrogen, Phosphorus and Organic Carbon in Transplanted Estuarine Marshes. (Under the direction of Stephen W. Broome and Ernest D. Seneca.)
- Tom Charles Creswell, Plant Pathology
Henagar, Alabama
- Dissertation: Occurrence and Development of Stem Blight of Blueberry in North Carolina Caused by *Botryosphaeria dothidea*. (Under the direction of Robert D. Milholland.)
- Karen Lynn Crippen, Food Science
Kingman, Kansas
- Dissertation: The Effect of Grind, Salt Concentration and Sucrose Concentration on the Flavor and Texture of Peanut Butter. (Under the direction of Donald D. Hamann.)
- Michael Anthony Cupo, Nutrition
Livingston, New Jersey
- Dissertation: The Effects of Certain Trace Minerals on the Toxicological Response and Nutrient Interactions in Chickens. (Under the direction of William E. Donaldson.)
- Alexander Willem deGroot, Fiber and Polymer Science
Clute, Texas
- Dissertation: The Solution Properties and Cellulose Dissolved in the Ammonia/Ammonium Thiocyanate Solvent System as Studied by Carbon-13 NMR Spectroscopy and Light Scattering. (Under the direction of John A. Cuculo and Michael H. Theil.)
- Muhammad Ahmad El-Taha, Operations Research
Beirut, Lebanon
- Dissertation: Sample-path Analysis of Queueing Systems: New Results. (Under the direction of Shaler Stidham, Jr.)
- Juan Marcos Fernandez, Animal Science
Guthrie, Oklahoma
- Dissertation: Effects of Subclinical Ammonia Toxicity on Intermediary Metabolism in Steers. (Under the direction of W. James Croom, Jr.)

- Chandrasekaran Immanuel Franklin, Botany
Madras, Tamil Nadu, India
- Dissertation: Some Morphogenetic Parameters Influencing Protoplast and Callus Cultures of Loblolly Pine. (Under the direction of Ralph L. Mott.)
- Maryvonne Fuentes, Chemistry
Lakewood, Colorado
- Dissertation: Characterization of the Excited States of Several Carbonyl Compounds of Chromium, Molybdenum and Tungsten and Several Dithiocarbamate Compounds of Titanium and Zirconium. (Under the direction of Anton F. Schreiner and Marion L. Miles.)
- Francisco de Paula Simones Lopes Gastal, Civil Engineering
Porto Alegre, R.S., Brazil
- Dissertation: Instantaneous and Time-dependent Response and Strength of Jointless Bridge Beams. (Under the direction of Paul Z. Zia.)
- Thomas Paul Gielda, Aerospace Engineering
Bay City, Michigan
- Dissertation: Accurate, Stable, Explicit Solution of the Parabolized Navier-Stokes Equations. (Under the direction of D. Scott McRae.)
- Kimberly Dawn Gwinn, Plant Pathology
Ravenswood, West Virginia
- Dissertation: Resistance of *Cercospora* Species to Cercosporin. (Under the direction of Kurt J. Leonard and Margaret E. Daub.)
- Glenn Carlton Hazelton, Forestry
Traverse City, Michigan
- Dissertation: The Ecological Visual Resource Assessment Process (EVRAP): The Ecological Approach and a Demonstration Project. (Under the direction of Hugh A. Devine.)
- Robert Eugene Hoag, Soil Science
Cary, North Carolina
- Dissertation: Characterization of Soils on Floodplains of Tributaries Flowing into the Amazon River in Peru. (Under the direction of Stanley W. Buol.)
- Richard Paul Hotz, Chemistry
Jamestown, North Carolina
- Dissertation: Synthetic Studies of Dibenzo[14]annulene Macrocycles and Their Transition Metal Compounds. (Under the direction of Robert D. Bereman and Suzanne T. Purrington.)
- Jing-Wen Jaw, Civil Engineering
Kushan, Taiwan, Republic of China
- Dissertation: Seismic Response of Multiply Connected MDOF Secondary Systems. (Under the direction of Ajaya K. Gupta.)

- Alireza Khaloo, Civil Engineering
Ahwaz, Iran
Dissertation: Behavior of Hoop Confined Concrete under Azial and Shear Loading. (Under the direction of Paul Z. Zia and Shuaib H. Ahmad.)
- Chung-Kyun Kim, Mechanical Engineering
Seoul, Korea
Dissertation: An Analytical Investigation of Leakage and Thermoelastic Problems in Rotating Seals. (Under the direction of Ralph A. Burton and Michael D. Bryant.)
- William Benson Kirkman, Horticultural Science
Raleigh, North Carolina
Dissertation: The Taxonomy, Ecology and Horticulture of *Vaccinium* Section *Herpothamnus* (Ericaceae). (Under the direction of James R. Ballington and Arthur W. Cooper.)
- Nader Saleh Korah, Mechanical Engineering
Alexandria, Egypt
Dissertation: Spray Evaporation in Direct Injection Diesel Engine. (Under the direction of Elsayed M. Afify.)
- Edward Stephen Kris, Nutrition
East Meadow, New York
Dissertation: Pre- and Postpartum Changes in Digestive Kinetics in Angus Cattle. (Under the direction of Kevin R. Pond and Raymond W. Harvey.)
- Douglas Alan Landis, Entomology
Raleigh, North Carolina
Dissertation: Assessing the Utility of the Feeding Deterrent Approach to Crop Protection. (Under the direction of Fred Gould and George G. Kennedy.)
- Nikolaos Vasilios Lazaridis, Chemistry
Agios, Stefanos, Greece
Dissertation: Selective Fluorination of Organosilicon Compounds. (Under the direction of Suzanne T. Purrington and Carl L. Bumgardner.)
- Fang-Jen Scott Lee, Food Science
Taipei, Taiwan, Republic of China
Dissertation: Effects of Oxidative Stress on the Biosynthesis of Antioxidant Enzymes and on Plasmid Stability in *Saccharomyces cerevisiae*. (Under the direction of Hosni M. Hassan.)
- Hrong-Ji Leu, Materials Science and Engineering
Taipei, Taiwan, Republic of China
Dissertation: Computer Simulation of Sintering Processes. (Under the direction of Ronald O. Scattergood.)
- Lee-Wen Lin, Biochemistry
Taipei, Taiwan, Republic of China
Dissertation: Regulation of Follicle Stimulating Hormone Subunit Genes by Gonadal Hormones. (Under the direction of William L. Miller.)

- Nen-Chin Liu, Materials Science and Engineering
Taipei, Taiwan, Republic of China
- Dissertation: Magnetic Materials Based on Transition Metal-Rare Earth-
(Boron, Carbon) Alloys. (Under the direction of Hans H. Stadelmaier.)
- Hubert Spencer Lyerly II, Psychology
Durham, North Carolina
- Dissertation: Improving the Social Competence of the Severely Psychi-
atrically Disabled through Interpersonal Problem-solving
Skills Training. (Under the direction of Howard G. Miller
and Donald W. Drewes.)
- Angela Pinto Maestrini, Civil Engineering
Pelotas, R.S., Brazil
- Dissertation: Finite Element Modeling of Shallow Water Waves. (Under
the direction of Michael Amein.)
- Sergio Roberto Maestrini, Civil Engineering
Pelotas, R.S., Brazil
- Dissertation: Membrane Behavior of Reinforced Concrete Shell Elements
including Tension-stiffening. (Under the direction of Ajaya
K. Gupta.)
- Stephen Frank Marsh, Plant Pathology
Wilmington, Delaware
- Dissertation: Amino Acid Metabolism in Relation to Aflatoxin Production
by *Aspergillus flavus*. (Under the direction of Gary A. Payne
and Kurt J. Leonard.)
- Marion Ray McKinnie, Animal Science
Pikeville, North Carolina
- Dissertation: Reproduction in Gilts Actively Immunized against Andros-
tenedione. (Under the direction of Jack H. Britt.)
- Robert Curlan McNeil, Forestry
Raleigh, North Carolina
- Dissertation: Variation of Nutrient Concentrations in Foliage and Varia-
tion of Weight and Nutrient Concentrations of Litter in Lob-
lolly Pine Plantations: Causes and Implications. (Under the
direction of Russell Lea.)
- Marc Yves Menetrez, Civil Engineering
Durham, North Carolina
- Dissertation: Removal of Radionuclides from Process Streams, a Series of
Applications. (Under the direction of Allen C. Chao and
Edward P. Stahel II.)
- David Wood Miller, Biological and Agricultural Engi-
neering
Chapel Hill, North Carolina
- Dissertation: A Simulation Study of Various Policies of Streamflow Allo-
cation on Users of a North Carolina Stream. (Under the
direction of Ronald E. Sneed and Robert S. Sowell.)

- David Alan Mortensen, Crop Science
Staten Island, New York
Dissertation: The Reciprocal Influences of Weeds and Soybeans on Growth, Reproductive Output and Canopy Environment. (Under the direction of Harold D. Coble.)
- Quan Quoc Nguyen, Applied Mathematics
Fairfax, Virginia
Dissertation: Minimal Solutions to Systems of Equations over a Free Semigroup. (Under the direction of F. Donald Stanat and Dana M. Latch.)
- Sakti Kumar Pal, Civil Engineering
Raleigh, North Carolina
Dissertation: Stochastic Analysis for Response and Stability of Horizontal Soil Sites and Earth Dams under Seismic Loading. (Under the direction of Mohammed S. Rahman and Chi C. Tung.)
- Danilo Pezo, Animal Science
Lima, Peru
Dissertation: Nutritional Diversity of Maritime Accessions of the Virgata Section of *Panicum*. (Under the direction of Joseph C. Burns.)
- Daniel John Pierce, Mathematics
Glen Ellyn, Illinois
Dissertation: Parallel Least Squares Computations and Related Material. (Under the direction of Robert J. Plemmons.)
- Roberto Abdiel Quiroz, Nutrition
La Concepcion, Panama
Dissertation: Forage Lignins: Isolation, Characterization and Degradation in the Gastrointestinal Tract of Ruminants. (Under the direction of Kevin R. Pond and Joseph C. Burns.)
- Richard Walton Ragan, Jr., Psychology
Newport News, Virginia
Dissertation: Biological Distraction Frequencies. (Under the direction of Richard G. Pearson.)
- Judith Kay Reffett, Nutrition
Winchester, Kentucky
Dissertation: Effect of Selenium on the Immune Response of Stressed Ruminants. (Under the direction of Jerry W. Spears.)
- Frank Charles Schnell, Toxicology
Raleigh, North Carolina
Dissertation: Neutral Ionophore-induced Chloride Permeability and Its Inhibition by *S,S,S*-Tributylphosphorotrithioate in Isolated Rat Liver Mitochondria. (Under the direction of Donald E. Moreland.)
- Hamid Reza Shafiei-Kermani, Chemistry
Tehran, Iran
Dissertation: Calculations of Kinetic Isotope Effects in the *syn*-Elimination of Substituted (2-Phenylethyl)dimethylamine Oxides. (Under the direction of Leslie B. Sims.)

- Linda Ehrlich Shurtleff, Botany
Greensboro, North Carolina
Dissertation: Ecological Implications of Cyanophycean Algal Toxins.
(Under the direction of Augustus M. Witherspoon.)
- Frederick William Simmons, Soil Science
Amherst, New Hampshire
Dissertation: Landscape and Soil Property Effects on Corn Grain Yield
Tillage Response. (Under the direction of D. Keith Cassel.)
- Victoria Lynn Smith, Plant Pathology
West Carrollton, Ohio
Dissertation: Infection of Host Tissue, Survival of Sclerotia and Epidemi-
ology of Disease in Processing Carrot Caused by *Sclerotium*
rolfsii Sacc. (Under the direction of D. Michael Benson.)
- Mark Edward Stewart, Chemical Engineering
Terre Haute, Indiana
Dissertation: Characterization of Physical Aging of Poly(methyl metha-
crylate) Powders by a Novel High Pressure Sorption Tech-
nique. (Under the direction of Harold B. Hopfenberg and
William J. Koros.)
- Tahlim Sudaryanto, Economics
Bogor, Indonesia
Dissertation: The Potential Impacts of Liberalized Trade Policies in the
United States and the European Economic Community on
International Markets for Sugar. (Under the direction of
Paul R. Johnson.)
- Akbar Sutawidjaja, Mathematics Education
Malang, Indonesia
Dissertation: Manipulative Materials in Early Number Instruction: A
Meta-analysis Review. (Under the direction of Lee V. Stiff
and John R. Kolb.)
- Michael Craig Teague, Psychology
Knightdale, North Carolina
Dissertation: Entry of an Organization Development Consultant: Predic-
tors of the Decision to Contract and Subsequent Consultation
Success. (Under the direction of Howard G. Miller.)
- James Douglas Thacker, Chemistry
Raleigh, North Carolina
Dissertation: The Isolation and Characterization of a Host Plant Specific
Feeding Stimulant for *Manduca sexta* Isolated from *Sola-*
num carolinense. (Under the direction of Charles G. More-
land and Jon Bordner.)
- Robert Roy Vanderslice, Toxicology
Apex, North Carolina
Dissertation: Cytochrome P-450 Isozyme 5: Its Unique Distribution Pat-
tern and Importance in the Metabolism of 2-Aminofluorene.
(Under the direction of Ernest Hodgson.)
- William David Witherspoon, Jr., Crop Science
Raleigh, North Carolina
Dissertation: Utilization of the Haploid Sporophyte as the Selection Unit
in Tobacco Breeding. (Under the direction of Earl A.
Wernsman.)

Ta-Chung Wu, Food Science
Taipei, Taiwan, Republic of China

Dissertation: Flavor Components and Phospholipid Changes Associated with the Development of Oxidized Off Flavors in Cooked Turkey Rolls. (Under the direction of Brian W. Sheldon and Hershell R. Ball, Jr.)

Tien-shuenn Wu, Civil Engineering
Taipei, Taiwan, Republic of China

Dissertation: Direct Computation of Tidal Circulation in Harbors. (Under the direction of Michael Amein.)

ALUMNI DISTINGUISHED PROFESSORS

<i>Name</i>	<i>School and Department</i>	<i>Date</i>
Michael A. Boles	School of Engineering Department of Mechanical & Aerospace Engineering	1987-90
Larry S. Champion	School of Humanities & Social Sciences Department of English	1987-90
J. M. Anthony Danby	School of Physical & Mathematical Sciences Department of Math	1987-90
Wendell N. McKenzie	School of Agriculture & Life Sciences Department of Genetics	1987-90

GRADUATE ALUMNI DISTINGUISHED PROFESSOR

<i>Name</i>	<i>School and Department</i>	<i>Date</i>
Ernest Hodgson WNR Scholar	School of Agriculture & Life Sciences Department of Entomology	1987-90

OUTSTANDING TEACHER AWARDS FOR 1986-87

<i>Name</i>	<i>School and Department</i>
Mahmoud A. Ayoub	Engineering Industrial Engineering
Pamela Banks-Lee	Textiles Textile Engineering and Science
Allen Beals	Agriculture & Life Sciences Economics and Business
William T. Fike	Agriculture & Life Sciences Crop Science
Charles K. Henrikson	Veterinary Medicine Anatomy, Physiology & Radiology
Robert G. Hitchings	Forest Resources Wood and Paper Science
Richard F. Keltie	Engineering Mechanical & Aerospace Engineering
Margaret F. King	Humanities & Social Sciences English
Grover C. Miller	Agriculture & Life Sciences Zoology
Charles G. Moreland	Physical & Mathematical Sciences Chemistry
R. James Peeler, Jr.	Agriculture & Life Sciences Economics and Business
Traci V. Reid	Humanities & Social Sciences Political Science and Public Administration
Joanne Rockness	Humanities & Social Sciences Economics and Business
Robert Savage	Physical & Mathematical Sciences Mathematics
Ronald O. Scattergood	Engineering Materials Science & Engineering
Robert T. Troxler	Education Occupational Education

Awards for Achievement 1986-1987

SCHOOL OF AGRICULTURE AND LIFE SCIENCES

Agriculture Council Outstanding Club Member Awards:

- Agronomy:* Richard B. Ward, Charlotte
Animal Science: Barry S. Foushee, Roxboro
Biochemistry: Michael G. Willits, Raleigh
Biological and Agricultural Engineering: Science Curriculum—Linda L. Blalock, Raleigh; Technology Curriculum—John M. Gann, Asheboro
Biology: Scott J. Nally, Charlotte
Agricultural Economics: John D. Bunting, Pinetops
Food Science: Sally L. Smith, Lexington
Horticulture: Christopher G. Berrier, Thomasville
Medical Technology: Sherrye P. Lee, Raleigh
Microbiology: Karen A. Motsinger, Lexington
National Agri-Marketing Association: Jeffrey C. Jennings, Elizabeth City
Poultry Science: Anna M. Hudson, Cary
Pre-Medical and Pre-Dental: Kevin R. Rust, Lumberton
Pre-Professional Health Society: W. Kent Guion, Durham
Pre-Veterinary: David W. Linzey, Raleigh
Wildlife Biology: Laverna B. Davis, Randleman

Agronomy

- Senior Highest Scholastic Average in Agronomy:* William D. Radford, Goldsboro
American Society of Agronomy Award, Most Outstanding Senior: Brian J. Smith, Pink Hill
Agronomy Club Leadership Award: Richard B. Ward, Charlotte

Animal Science

- Most Outstanding Club Member:* Amy E. Nance, Burlington
Most Outstanding Senior: Teena Wooton, Hookerton
American Society of Animal Science Undergraduate Awards: Bruce E. Akers, Raleigh; Daniel B. Borders, Shelby; Yvonne D. Carter, Shelby; Kelli M. Ferris, Apex; Lydia A. Thabet, Clemmons; Anne M. Scheer, Raleigh; Mary R. Smith, Rocky Mount; James E. Tuck, Jr., Graham; Tiffany C. Barnhill, Clarendon; Cynthia D. Burnett, Charlotte; Susan G. Emerick, Hillsborough; Tracy A. Meadows, Raleigh; Martha B. Shannon, Rocky Mount; Stephen H. Brenn, New Providence, NJ; Heath R. Byrd, Wilkesboro; Ronald A. Feimster, Cleveland; Todd A. Grubb, Raleigh; Stephanie K. Kordick, Raleigh; Charles W. Miller, Jr., Durham

Biochemistry

- Outstanding Biochemistry Student Award:* Thomas J. Monaco, Jr., Raleigh

Biological and Agricultural Engineering

- American Society of Agricultural Engineers, Student Honor Awards, Student Branch of ASAE:* Dana J. Bolden, Clyde
Agricultural Engineering Technology Club: John M. Gann, Asheboro

Botany

- Most Outstanding Students:* Neil A. Armingeon, Tuscaloosa, Alabama; Edwin A. Shearin, Raleigh

Food Science

- B. M. Newell Award:* Sally L. Smith, Lexington
Forbes Leadership Award: Patricia R. Butcher, Kloof, South Africa
Ambrosia Chocolate Top Scholar Award: Patricia R. Butcher, Kloof, South Africa
Crouch Scholastic Achievement Award: Rabab Ahman Saadi, Amman, Jordan

Horticultural Science

Outstanding Senior Horticulturist Award: Catherine Jane Knes-Maxwell, Huntersville

Microbiology

Most Outstanding Student: Angela M. Frazier, Raleigh

Poultry Science

T. T. Brown Poultry Science Club Award: Sharon A. Heins, Raleigh

Zoology

Most Outstanding Student: Kevin R. Rust, Lumberton

SCHOOL OF DESIGN

The American Institute of Architects School Medal: Ellen Leslie Weinstein, New York City, NY

The American Institute of Architects Certificate of Merit: Glenn Lyle Peters, Kelowna, British Columbia

Alpha Rho Chi Medal: Ellen Leslie Weinstein, New York City, NY

North Carolina Chapter of The American Institute of Architects Book Award: Ellen Leslie Weinstein, New York City, NY

Richard Green Prize for Design Achievement: Richard Harrison Best, Raleigh

Architecture Faculty Book Award: William Gilbert Spencer, Jr., Boone

Walter Hook Book Award: Andrew Norman Leager, West Jefferson

American Wood Council Book Award: Diane Gladys Evans, Germantown, MD

The American Society of Landscape Architects Certificate of Honor: Paula Faye Gornto, Durham; Barbara Brooks Haislip, Raleigh; Catherine Lynn Johnston, Raleigh

The American Society of Landscape Architects Certificate of Merit: Tony Michael Tate, Mebane; Wayne Walter Schindler, Raleigh

North Carolina Chapter of The American Society of Landscape Architects Book Award: Kevin Joseph Tankersley, White Marsh, MD

Landscape Architecture Faculty Award: Howard Alan Partner, Monmouth, OR

Product Design Book Award: Kevin Dale Merino, Los Angeles, CA; Robert Edwin George, Lexington

Visual Design Book Award: Elizabeth Ann Hobbs, Raleigh; Kermit Lavon Bailey, Henderson

Design Faculty Book Award: George Robert Hager, Wilmington

Orton A. Boren Service Award: Betsy Carol West, Shelby

SCHOOL OF EDUCATION

Education Council Outstanding Senior Awards:

Agricultural Education: Nancy Lynne Martin Turpen, Beechwood, NJ

Health Occupations Teacher Education: Katherine Lee Stephenson, Selma

Industrial Arts Education: Penny Lynn Allen, Spring Hope

Industrial and Technical Education: Walter Nowell Perry III, Raleigh

Mathematics Education: June LaVerne Blackwell, Raleigh

Psychology (outstanding graduating senior): Kevin Abbott Hodge, Garner

Psychology (general option): Lane Faires Geddie, High Point

Psychology (human resource development option): Sarah Thomason Zmick, Raleigh

Science Education: Kelly Thomas Smith, Warsaw

Agricultural Education Awards to Most Outstanding Seniors:

Fall 1986: Dan Barry Croom, Seven Springs

Spring 1987: Evelyn McAdams Browning, Hillsborough

Alpha Pi Chapter, Epsilon Pi Tau Leadership Award: David Paul Trueblood, Hertford

Durwin M. Hanson Achievement Award: Evelyn McAdams Browning, Hillsborough

Psychology Department Award for Academic Achievement: Noelle Lyn Garrou, Valdese

Psychology Department Award for Service to the Department: Theresa Ann Kelly, Raleigh

Vocational Industrial Clubs of America Collegiate Leadership Award: Walter Nowell Perry, III, Raleigh

Service Award to Outstanding Teacher in Science Education: Constance B. Lloyd

Service Award to Outstanding Teacher in Mathematics Education: Ethylene Hobbs

SCHOOL OF ENGINEERING

Engineering Senior Award for Scholarly Achievement: Lisa Carol Gardner, Garner (Electrical and Computer Engineering)

Engineering Senior Award for Citizenship and Service: Leila Ann Osteen, Rockingham (Civil Engineering & Computer Science)

Engineering Senior Award for Leadership: Ellen Adair Page, Raleigh (Electrical & Computer Engineering)

Engineering Senior Award for the Humanities: Engineering Senior Award for Scholarly Achievement: Paul Glenn McKee, Lynchburg, VA (Electrical & Computer Engineering)

Biological and Agricultural Engineering

Agricultural Council Outstanding Club Member Award for Biological and Agricultural Engineering—Science Curriculum: Linda Liles Blalock, Raleigh

American Society of Agricultural Engineers Student Honor Award: Dana V. Bolden, Clyde

Chemical Engineering

Eastern North Carolina Section of AIChE Outstanding Senior Award: Lisa Carol Gardner, Garner

Chemical Engineering Senior Award for Outstanding Contributions to Chemical Engineering: Brian W. Ranson, Charlotte

The E. M. Schoenborn Graduate Student Award: Joan Ayer Rodberg, Garner

Civil Engineering

American Society of Civil Engineers, The Outstanding Senior Award: Marlene Frances Hale, Richmond, VA

American Society of Civil Engineers Senior Awards: George Roscoe Barbour, Jr., Raleigh; Dan Edelberto Brewer, Raleigh; Karen Phipps, Raleigh

Associated General Contractors Award to Outstanding Senior in Civil Engineering/Construction Option: David Mark Tart, Benson

Civil Engineering Outstanding Teaching Assistant Awards: Joanne Cherin Eder, Virginia Beach, VA; Kevin Nolan Poythress, Cary; Brenda Cecilia Serracin, Panama City, Panama

Electrical and Computer Engineering

Outstanding Electrical Engineering Senior Award: Todd Alan Cook, Huntsville, AL

Outstanding Computer Engineering Senior Award: John Reid Hauser, Cary

Outstanding IEEE Student Award: Charles Joseph Knes-Maxwell, Chapel Hill

Furniture Manufacturing and Management

Rudolph Willard Award, Outstanding Senior in Furniture Manufacturing and Management: Stacey Zane Graves, Burlington

Industrial Engineering

Outstanding Senior in Industrial Engineering: Maria John Pribas, Charlotte

Materials Engineering

Outstanding Senior Award: John Peter Bade, Jr., Hopewell Junction, NY

Mechanical and Aerospace Engineering

American Society of Mechanical Engineers Certificate of Award for Outstanding Student Member: Lisa Ann Dyson, Mocksville

American Institute of Aeronautics and Astronautics Outstanding Achievement Award: William Neil Dunn, Raleigh

American Institute of Aeronautics and Astronautics Chairman Certificate: John Robert Olds, Spartanburg, SC

National Honor Society of Aerospace Engineering, Sigma Gamma Tau Honor Undergraduate Student Award: John Robert Olds, Spartanburg, SC

SCHOOL OF FOREST RESOURCES

Forestry

Biltmore Work Scholarships: Nancy Martin Turpin, Cary; Bradford L. McConnell, Greensboro; David A. Markowski, Havelock; David G. Cole, Raleigh; Timothy W. Tabak, Raleigh; Michele L. Spersrud, Raleigh; Timothy R. Eudy, Albemarle

Ralph C. Bryant Scholarship Award: Timothy R. Eudy, Albemarle

E. F. Conger Scholarship: Kimala Leigh Dills, Goldston; Christopher F. Dumas, Wilmington; Jerold M. Bryant, Durham

James L. Goodwin Award: Gwen W. Amick, Ann Arbor, MI; Jody T. Brady, Raleigh; Paul T. Eriksson, Ledgewood, NJ; Timothy R. Eudy, Albemarle; John H. Grogan, III, Raleigh; Ian C. Shannon, Sharon, MA; Randall F. West, Jr., Andrews; William A. Casey, North Wilkesboro; W. Roy Cloninger, Cary; Clare M. Dellwo, Raleigh; Mark V. Pearson, Morganton; Larry E. Ridenhour, Raleigh

Jonathan Wainhouse Memorial Scholarship Awards: James W. Hauser, Raleigh; James Frederick Shern, Derwood, MD; David Bruce Powell, Jr., Franklin, VA

George C. Slocum Awards: William Roy Cloninger, Cary; William J. Slayton, Wake Forest

John M. and Sally Blalock Beard Forestry Scholarships: Jonathan Mark Bograd, Charlotte; Andrea Lynne Allison, Concord; William R. Nethery, Charlotte; John Franklin Billingsley, Peachland (Deceased)

Wood and Paper Science

Pulp and Paper Technology

Alonzo Aldrich Scholarship: Alan James Watters, Chesterfield, VA

Dietrich V. Asten Scholarship: Mark S. Keller, Seven Valleys, PA

M. Lebbay Boinest, Jr. Scholarship: G. Wayne Marks, Cameron

William E. Caldwell Scholarship: R. Wade Harris, Vidor, TX

Lawrence H. Camp Scholarship: Timothy A. Nuckols, Glen Allen, VA

Caraustar Industries Scholarship: Jeffrey Wilson Thornton, Meridian, MS

J. Robert Carpenter Scholarship: George J. Joncas, Rockingham

Terrri P. Charbonnier Scholarship: Deborah J. Massey, Roanoke Rapids

Drs. Li-Sho & Lee-Fun Chang Scholarship: Tony L. Baker, Hope Mills

Charles W. Coker, Sr. Scholarship: Joseph W. Johnson, Mauldin, SC

Continental Forest Industries Scholarship: David A. Hyer, Blakes, VA

Salesmen's Society to the Dixie Pulp and Paper Mills Scholarship: James A. Stuber, Southern Pines

Eugene E. Ellis Scholarship: Barbara A. Ludwig, Tell City, IN

Robert G. Hitchings Scholarship: Christopher A. Mastro, Chester, VA

International Paper Company Scholarship: Jack L. Robinson, Elkin

John R. Kennedy Scholarship: Gavin Lee Gaynor, Hawesville, KY

John Milton May, Jr. Scholarship: Stacy Ray Lee, Vanceboro

Nalco Scholarship: Richard Venditti, Monroe, CT

George E. Oakley Scholarship: Cynthia A. Lowder, Wingate

Sture G. Olsson Scholarship: William M. Lipscomb, Jr., West Point, VA

Harry H. Saunders Scholarship: Kathleen Carrell, Pensacola, FL

Dr. Fred B. Schelhorn Scholarship: Timothy K. Wilde, Brevard

Showlin Family Scholarship: Jasdev S. Gill, Augusta, GA

Ray Smith Scholarship: Scott P. LeGrand, Richmond, VA

Southeastern PIMA Scholarship: Jack A. Hammond, Covington, VA

Southern PIMA Scholarship: Heather L. Larsh, Silsbee, TX

Stone Container Corporation Scholarship: Derek S. Owens, Gloucester, VA

Dwight J. Thomson Scholarship: Christine Rose Lamarre, Monroe

Union Camp Corporation Scholarship: Andrew B. Gloster, Greensboro

Vinings Chemical Scholarship: Chavonda J. Jacobs, Hephzibah, GA

Weyerhaeuser Company Scholarship: James E. Bradbury, Lufkin, TX

Wood Science & Technology

Carolina Canadian Lumber Sales Scholarship: Gregory R. Kasten, Edwardsville, IL

The Roy Carter Scholarship: Kenneth W. Odom, Jr., Severn
Weyerhaeuser Company Scholarships: Eugene W. Brown, Rich Square; David C. Evans, Wallace; Kevin D. Griffin, Williamston; Bruce A. Hafley, Raleigh; Stephen M. Strand, Greensboro; George T. Vann, Conway

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

Highest Scholastic Achievement Award: Karen Allen Burkhead, Raleigh

Outstanding Senior Award: Brenda K. Flory, Lancaster, PA

SCHOOL OF PHYSICAL AND MATHEMATICAL SCIENCES

School Awards to Outstanding Seniors

Scholarship: Tim Brian Koonce, New Bern; Amy Fay Moormann, Morganton; Simon Verghese, Cary

Citizenship and Service: William Drummond Haig, Nashua, NH

Humanities: Melissa Ann Brewer, Elon College

Leadership: Daniel Philip Dufour, Old Town, ME

Departmental Awards

Chemistry

The North Carolina Institute of Chemists' Outstanding Student Award: Andrea Joan Chee Wong, Greensboro

The Merck Index Awards for Scholastic Achievement in Chemistry: Ann Kennett Stout, Sanford

The CRC Press Freshman Chemistry Achievement Award: John Howard Sanford, Jr., Fuquay-Varina

The 1987 Undergraduate Award in Analytical Chemistry: Darrel Palmer Johnson, Durham

Physics

Outstanding Graduating Senior in Physics: Simon Verghese, Cary

Statistics

Outstanding Graduating Senior in Statistics: Daniel Philip Dufour, Old Town, ME

Mathematics

Outstanding Graduating Senior in Mathematics: Amy Fay Moormann, Morganton
John Cell Scholarships: Tonya Lynn Etchinson, Siler City; Timothy Brian Koonce, New Bern

Carey Mumford Scholarship: Wanda Louise Freeman, Liberty

Mary Alice and Hubert V. Park Scholarship: William P. Setzer, Hickory

Jack Levine-Charles Anderson Award: Timothy Brian Koonce, New Bern

John Cell Freshman Scholarship: Denise Gwyn Hager, Denver

Marine, Earth and Atmospheric Sciences

Outstanding Graduating Senior in Geology/Geophysics: Trevor A. P. Bannister, Raleigh

Outstanding Graduating Senior in Meteorology: Phillips Barnes Williams, Rocky Mount

Undergraduate Scholarship in Geology/Geophysics: Melissa Ann Ballington, Cary

SCHOOL OF TEXTILES

Joseph D. Moore Honor Award: Timothy Carl Jones, Graham

Harry Ball Honor Award: Mary Kay Patterson, Bedford, NH

Lawrence Iason Honor Award: Galen Todd Brandon, Harrisburg

Chester H. Roth Honor Award: Christene Marie Ranieri, Greensboro

John M. Reeves Scholarship: Martha C. Lambeth, Greensboro

Murray Frumkin Honor Award: Craig Steven Behringer, Gastonia
Textile Veterans Association Honor Award: Jeffrey Earl Daye, Yadkinville
John E. Reeves Award: Kimberly L. Wright, Greensboro
Donald F. McCullough Award: Edgar Carter Hull, Charlotte
John N. Gregg Award: Benjamin Wesley Swain, Charlotte
American Association of Textile Chemists & Colorists Award: Doris Louetta Pierce, Clayton
Phi Psi Textile Fraternity Award: Doris Louetta Pierce, Clayton
American Association for Textile Technology Award: Ramona Deanne Allison, Biscoe
Sigma Tau Sigma Scholarship Fraternity Award: Mariane L. Bakita
Kappa Tau Beta Student Leadership Award: Jo Dee Buchan, Henderson
Delta Kappa Phi Textile Fraternity: Bradley Randall Way, Fayetteville
Henry A. Rutherford Honorary Award: Elizabeth Lanier Smith, Wilmington
AAMA-Apparel Student of the Year: Jo Dee Buchan, Henderson
The Dean's Award: Jo Dee Buchan, Henderson

ALUMNI ATHLETIC AWARD

William Erik Kramer, Conoga Park, CA

THE HONOR SOCIETY OF PHI KAPPA PHI

Awards for 1987

Intellectual Achievement, Ph.D. Candidates: Mark C. Conner, Michael W. Cunningham

Intellectual Achievement, Masters Candidate: Sara Morrison-Rowe

Intellectual Achievement, Senior Candidates: Robert C. Blohm, Gary L. Gilleskie, Frederick R. Indermaur, Scott S. Lund, Paul G. McKee, Amy F. Moorman, Anne Naismith

Intellectual Achievement, Junior Candidates: Kelly L. Berkstresser, Brian H. Camp, Kelly M. Carter, Heidrum B. Dilling, Gary A. Huber, Mark B. McCoy, Michael D. Neaves, Tan Thanh Duy Phan, Ninette Y. Ribet, Kanneth R. Rose, Amy K. Stout, Shawn M. Toffolo, Leslie G. Wehe, Richard L. Williams

Intellectual Achievement, Sophomore Candidates: Samuel T. Bailey, Jeffrey G. Crater, Dana P. Danger, William J. Farlow, Deborah N. Griffin, James W. Hauser, Jeffrey L. Helms, Christopher W. Johnson, Rick M. McCorkle, Ronald L. Meggison, Jr., Kimberly A. Monroe, Charles A. Morse, Sharon L. Peplinski, Steven G. Skaggs, Lloyd A. Smith, Leigh A. Young

GOLDEN CHAIN HONOR SOCIETY MEMBERS FOR 1986-87

Kathleen Noel Christensen
 Patti Leigh Hilliard
 Marjorie Wetherbee Hodges
 Andrij Walter Huryn
 Frederick Richard Indermaur
 Martha Craig Lambeth
 Elizabeth Diane Mynatt
 Lillian Hamilton Rinker
 Elizabeth Lanier Smith
 Sheila Jane Stone
 Pearl Jennifer Tezano
 Janet Blair Tidwell

ARMY ROTC AWARDS

Department of Army Superior Cadet Award: Wynand C. Depuy, Jeffrey L. Sasser, Brian K. Harris, William D. Thurmond

Society of American Military Engineers: John D. Harrison, Garland H. Goodrich

American Logistics Association Award: Jeffrey A. Bhe

American Defence Preparedness Association Award: Jennifer Cross

Association of The United States Army Award: George B. Spence III
Armed Forces Communication and Electronics Association Honor Award: Terrence E. Evans
Reserve Officer's Association Award: James K. Comer, Gregory N. Washington, James P. Hall
American Legion Award for General Military Excellence: Barry F. Huggins, Brian D. Hinkle
American Legion Award for Scholastic Excellence: Blair L. Hawkins, Christopher G. Cross
Veterans of Foreign Wars Award: Robert L. Mickey
American Veterans of World War II, Korea and Vietnam Award: Calvin R. Moore
National Sojourners Award: Richard C. Dyer
Sons of The American Revolution: Alicia G. Bridgeman
Military Order of The World Wars Award: Karen E. Schroeder, David B. Slaughter, Robin A. Ellerbe, Robert T. Johnson
Daughters of The American Revolution: Carl W. Ramsey
Daughters of Founders and Patriots of America Award: Elizabeth T. Robb
George C. Marshall Award: Robert C. Aldridge
Legion of Valor of Bronze Cross for Achievement: Blair L. Hawkins
Society of The War of 1812 Award: Woodrow O. Wilson III
Pallas Athene Award: Terryne F. Murphy
Retired Officer's Association Award: William G. Eades
Association of The United States Army History Award: William D. Thurmond

DEPARTMENT OF NAVAL SCIENCE AWARDS

Navy League Award: Mark William Corbett

AIR FORCE ROTC AWARDS

Society of the War of 1812: Stephen Michael Blair
Air Force Association Award: Thomas Clark Moore
American Legion—Military Excellence—AS 400 (gold): Michael Romeo Burton
American Legion—Military Excellence—AS 300 (gold): Kevin Henry Van Hall
American Legion—Military Excellence—AS 200 (silver): Rogert Scott Yates
American Legion—Military Excellence—AS 100 (bronze): Donald Ted Harris
American Legion—Scholastic Excellence—AS 400 (gold): Denette Lee Sleeth
American Legion—Scholastic Excellence—AS 300 (gold): James Christopher Thomas
American Legion—Scholastic Excellence—AS 200 (silver): Michael Alan Daniels
American Legion—Scholastic Excellence—AS 100 (bronze): Douglas Joseph Martoccia
Daughters of Founders and Patriots of America: Sandra Kay Watson
Daughters of The American Revolution: Deborah Ann Crawford
Reserve Officers Association—AS 400: Kathryn Covert
Reserve Officers Association—AS 300: Erin Marie Manning
Reserve Officers Association—AS 200: Richard Alan Coe
American Defense Preparedness Association: David John Diserafino
Military Order of The World Wars—AS 300: Theresa Sue Bass
Military Order of The World Wars—AS 200: Linda Renee Edwards
Military Order of The World Wars—AS 100: Patrick Reed Terry
Veterans of Foreign Wars—AS 400: Robert Kenneth Boone
Veterans of Foreign Wars—AS 300: Michael Robert Dennis
Veterans of Foreign Wars—AS 200: Timothy Darnell Blount
Veterans of Foreign Wars—AS 100: Paul Joseph Romiti
National Sojourners: Darren Christopher Morton
Retired Officers Association: Thomas Clark Moore
Sons of The American Revolution: James Carlton Duckworth IV
Armed Forces Comm & Electr Assn Award (AFCEA): Victor Mattison Floyd Jr.
General Dynamics: Kelly Yvonne George

Army ROTC Commissionees

DECEMBER 1986

Gregory L. Provo Mechanicsville, VA
Joseph G. Byrum Charlotte

MAY 1987

Robert A. Boyette Wilson
James H. Christman, Jr. Fayetteville
Rosina A. Collins Fayetteville
Christopher G. Cross Forest City
Garland H. Goodrich Petersburg, VA
James P. Hall Fayetteville
William T. Harris Canandaigua, NY
Robert E. Hester Rocky Mount
Gartha Ingram III Fayetteville
Robert T. Johnson Mount Olive
Diane L. Lemly Spring Lake
Kervo F. Locklear Laurinburg
Jerry V. Midyette Engelhard
Cassandra D. Mudd Fayetteville
Terryne F. Murphy Fort Rucker, AL

AUGUST 1987

Thomas A. Harraghy Cary

Navy ROTC Commissionees

Thomas Barnard Cherry Point
David Bryant DeMarest, NJ
Jonathan Cook Cary
Mark Corbett Monrovia, MD
Steven Lamoureux Taylors, SC
David Nix Rutherfordton
Michael Obradovic Blackstone, VA
Ronald Ricci Baltimore, MD
Allen Roper West End
Teresa Sanford Kinston
Kirk Wille Raleigh
Fred Wood Huntersville

Air Force ROTC Commissionees

DECEMBER 1986

Jeffrey E. Berthold	Greensboro
Donald P. Duckett, Jr.	Leicester
David M. Fellows	Elizabeth City
James W. Haynes	Fayetteville
Carl E. Price	Lenoir

MAY 1987

Michael R. Burton	Clinton
David J. Diserafino	Wayne, PA
Terry E. Hunter	Goldsboro
Robert L. Jones	Raleigh
Charles S. Joyce	Stuart, VA
Brian M. Killough	Lancaster, SC
Dallas W. Lackey	Morganton
Scott D. Walters	Spartanburg, SC
Clyde A. Weirick	Hayesville
Jerome Williams	Whiteville
Colin J. Wright	Fayetteville

AUGUST 1987

Martin J. Carter	Winston-Salem
James M. Coon	King
William Grigg	Lawndale
Allen B. Ingle	Marshall
John R. Kivett	Asheboro



1987 CENTENNIAL COMMENCEMENT

ACKNOWLEDGEMENTS

The following non-University organizations have contributed significantly to the success of our commencement.

Mr. Giles Hunnings, Vice President
Fieldcrest Cannon, Inc., Eden, N. C.

Carpet for Centennial Stage

Mr. Frank Greathouse, Owner
Realizations, Inc., Raleigh, N. C.

Design and Implementation of
Centennial Stage Backdrop and
Centennial Logo Banners

Mr. Wade C. Miller, Jr., Owner
Sound Engineering, Asheboro, N. C.

Sound Systems



North Carolina State University **Bulletin**

summer sessions
1987



February 1987

DEFINITIONS OF ETHNIC GROUPS

White (not of Hispanic origin). Persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.

American Indian or Alaskan Native. Persons having origins in any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.

Black (not of Hispanic origin). Persons having origins in any of the black racial groups.

Asian or Pacific Islander. Persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands. This includes for example, China, Japan, Korea, the Philippine Islands, American Samoa.

Hispanic. Persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.



SUMMER SESSIONS 1987
North Carolina State University
Raleigh, North Carolina

SUMMER SESSIONS 1987 REGISTRATION APPLICATION INFORMATION

STUDENTS ELIGIBLE TO USE THE ENCLOSED SUMMER SESSIONS REGISTRATION APPLICATION:

Only Lifelong Education students are eligible to use the enclosed Summer Sessions Registration Application.

The Registration Application form *must* be used by all visiting students from other colleges or universities who will be classified as *Lifelong Education students* and by all students who are currently classified as Lifelong Education students at North Carolina State University.

A *Lifelong Education student* is one who has not been formally admitted as a degree candidate to North Carolina State University and does not wish regular classification of any kind at the University. See page 10, Lifelong Education Students, for additional information.

NOTE: All Lifelong Education students (including those from other universities and colleges) are advised that NCSU degree students are always given priority for Summer Sessions classes. *Acceptance of the Registration Application for Lifelong Education students by the Summer Sessions Office in no way constitutes a guarantee that class space will be available.*

STUDENTS NOT ELIGIBLE TO USE THE ENCLOSED SUMMER SES- SIONS REGISTRATION APPLICATION:

1. The Registration Application form is *not* to be used by any classified degree candidate, undergraduate or graduate, now attending North Carolina State University. Such students must preregister through their advisers (see page 13).
2. The Registration Application form is *not* to be used by any student who has previously enrolled as a degree candidate at North Carolina State University. Such students (former students returning) must apply for readmission to the University by writing to the Department of Registration and Records, North Carolina State University, Box 7313, Raleigh, North Carolina 27695-7313 (see page 13).

INFORMATION:

For additional information about the Summer Sessions write to:

The Director of Summer Sessions
North Carolina State University
Box 7401
Raleigh, N.C. 27695-7401

or call (919) 737-2265.

CONTENTS

Administration	4
Summer Sessions Calendars 1987	5
First Session	5
Second Session	5
Ten-Week Session	6
North Carolina State University	7
The Summer Sessions	9
Admissions	9
Registration Procedures	13
Academic Regulations	18
Expenses	18
Financial Aid	22
Counseling	23
Housing	23
D.H. Hill Library	25
Summer Activities	26
University Student Center	26
Special Courses and Institutes	27
NCSU Middle School Workshop	27
Institute for Teachers of Gifted and Talented	28
Institute for Teaching Visually Impaired	28
Developing Thinking Skills Across the Curriculum	28
Teaching of Writing Institute	28
Highlands Biological Station	29
Evening Summer Sessions and Undergraduate Degree Programs	30
Summer Institute in English for Speakers of Other Languages	31
Independent Study by Extension	31
Course Listings	33
Late Afternoon and Evening Classes	104
Summer Sessions Faculty	111
Campus Map	120



NORTH CAROLINA STATE UNIVERSITY

ADMINISTRATION

Bruce R. Poulton, *Chancellor*

Nash N. Winstead, *Provost and Vice Chancellor*

William L. Turner, *Vice Chancellor for Extension and Public Service*

Thomas H. Stafford Jr., *Vice Chancellor for Student Affairs*

George L. Worsley, *Vice Chancellor for Finance and Business*

John T. Kanipe Jr., *Vice Chancellor for Development*

Albert B. Lanier Jr., *Director of University Relations*

Debra Stewart, *Dean of the Graduate School*

Franklin D. Hart, *Vice Chancellor for Research*

DEANS OF THE SCHOOLS

Durward F. Bateman, *School of Agriculture and Life Sciences*

Claude E. McKinney, *School of Design*

Carl J. Dolce, *School of Education*

Larry K. Monteith, *School of Engineering*

Eric L. Ellwood, *School of Forest Resources*

William B. Toole, III, *School of Humanities and Social Sciences*

Garrett Briggs, *School of Physical and Mathematical Sciences*

Dame S. Hamby, *School of Textiles*

Terrence M. Curtin, *School of Veterinary Medicine*

SUMMER SESSIONS

William L. Turner, *Vice Chancellor for Extension and Public Service*

John F. Cudd Jr., *Director*

Nancy E. Polk, *Assistant Director*

ADMISSIONS

Anna P. Keller, *Dean*

REGISTRATION

James H. Bundy, *University Registrar*

SUMMER SESSIONS CALENDARS

1987

FIRST SESSION (MAY 18-JUNE 24)

April 3	Friday	Last day to preregister
May 18	Monday	Registration/Change Day
May 19	Tuesday	First day of classes
May 20	Wednesday	Last day to add a course without permission of instructor
May 25	Monday	Last day to add a course; last day to withdraw or drop a course with a refund (NOTE: The tuition and fees charge is based on the number of hours and courses officially carried as of this date.)
May 29	Friday	Last day to withdraw or drop a course without a grade, or to change from credit to audit, at the 400 level or below
June 5	Friday	Last day to withdraw or drop a course at the 500 or 600 level without a grade
June 22	Monday	Last day of classes
June 23, 24	Tuesday, Wednesday	Final examinations

FIRST SESSION FINAL EXAMINATION SCHEDULE

Examination Times	0800-1100	1300-1600	1800-2100
	Hour Class Actually Begins During the Session		
Tuesday, June 23	0730, 0800, 0910	1140	1745
Wednesday, June 24	0950, 1020	1300, 1340	1915, 1945

SECOND SESSION (JUNE 29-AUGUST 5)

May 14	Thursday	Last day to preregister
June 29	Monday	Registration/Change Day
June 30	Tuesday	First day of classes
July 1	Wednesday	Last day to add a course without permission of instructor
July 3	Friday	Holiday
July 6	Monday	Last day to add a course; last day to withdraw or drop a course with a refund (NOTE: The tuition and fees charge is based on the number of hours and courses officially carried as of this date.)
July 10	Friday	Last day to withdraw or drop a course without a grade, or to change from credit to audit, at the 400 level or below
July 17	Friday	Last day to withdraw or drop a course at the 500 or 600 level without a grade
August 3	Monday	Last day of classes
August 4, 5	Tuesday, Wednesday	Final examinations

SECOND SESSION FINAL EXAMINATION SCHEDULE

Examination Times	0800-1100	1300-1600	1800-2100
	Hour Class Actually Begins During the Session		
Tuesday, August 4	0730, 0800, 0910	1140	1745
Wednesday, August 5	0950, 1020	1300, 1340	1915, 1945

TEN-WEEK SESSION (MAY 18-AUGUST 3)

April 3	Friday	Last day to preregister
May 18	Monday	Registration/Change Day
May 19 (20)*	Tuesday	First day of classes
	(Wednesday)	
May 21 (25)*	Thursday	Last day to add a course without permission of instructor
	(Monday)	
May 25	Monday	Last day to add a course; last day to withdraw or drop a course with a refund (NOTE: The tuition and fees charge is based on the number of hours and courses officially carried as of this date.)
		Last day to withdraw or drop a course without a grade, or to change from credit to audit at the 400 level or below
June 9 (10)*	Tuesday	Last day to withdraw or drop a course at the 500 or 600 level without a grade
	(Wednesday)	
June 16 (17)*	Tuesday	Holiday
	(Wednesday)	
July 3	Friday	Last day of classes for Tuesday/Thursday classes
July 23	Thursday	Last day of classes for Monday/Wednesday classes
July 27	Monday	Final examinations for 1745, Tuesday/Thursday classes
July 28	Tuesday	Final examinations for 1745, Monday/Wednesday classes
July 29	Wednesday	Final examinations for 1915, 1945 Tuesday/Thursday classes
July 30	Thursday	Final examinations for 1915, 1945 Monday/Wednesday classes
August 3	Monday	

*First day for Tuesday/Thursday classes. Date in parentheses for Monday/Wednesday classes.

TEN-WEEK SESSION FINAL EXAMINATION SCHEDULE (As noted in the calendar above)



Prominent in the above aerial of the central North Carolina State University campus are three high-rise residence halls (foreground), the circular Harrelson Hall with the adjacent towers of Cox and Dabney Halls, and in the upper left, the tower of the D. H. Hill Library. The central campus encompasses some 623 acres.

North Carolina State University

North Carolina State University is one of the nation's major public universities and shares the distinctive character of Land-Grant state universities nationally—broad academic offerings, extensive public service, national and international activities, and large-scale extension and research programs. NCSU is celebrating its centennial this year.

The University is organized in nine schools and the Graduate School. The nine schools are Agriculture and Life Sciences, Design, Education, Engineering, Forest Resources, Humanities and Social Sciences, Physical and Mathematical Sciences, Textiles, and Veterinary Medicine. In addition, a complex of divisions, institutes, and centers provides for a wide range of special academic, research, and extension programs.

Academic opportunities are provided in 89 fields leading to baccalaureate degrees, 75 master's degree fields and 48 fields leading to doctoral degrees.

Research activities span a broad spectrum of about 700 scientific, technological and scholarly endeavors.

Extension work on a statewide basis in each of the 100 counties and the Cherokee Indian Reservation carries the University's campus to the state's boundaries. Diverse extension activities are carried on by all nine schools and a number of specialized institutes and centers.

The University has approximately 6,000 employees. There are 2,800 faculty and other academic personnel, including 1,400 graduate faculty and 250 adjunct faculty.

There are 153 buildings on the central campus of 623 acres and the School of Veterinary Medicine satellite campus of 180 acres. The University is beginning development of a recently acquired, adjacent campus of 780 acres. In addition, NCSU has 88,000 acres on a statewide basis, including one research and endowment forest of 78,000 acres. Near the main campus are 2,500 University acres which include research farms; biology and ecology sites; genetics, horticulture and floriculture nurseries; forests; and areas such as Carter-Finley Stadium.

The University's Wolfpack athletic teams are well-known nationally. The basketball team was national champion in 1974 and 1983. The football team has been the Atlantic Coast Conference champion five times and co-champion twice and has won five bowl games. Numerous NCSU athletes have won NCAA, national, and international honors, including medals in the last five Olympics. The Wolfpack women's intercollegiate cross-country team won national championships in 1979 and 1980, and an NCSU woman athlete won the NCAA cross-country championship in 1985. The men's cross-country team has won the ACC title for the past five years. Many NCSU athletic teams boast of all-Americans among their members.

North Carolina State University is one of the three Research Triangle Universities along with Duke University and the University of North Carolina at Chapel Hill. In the 30-mile triangle formed by the three universities is the 5,000-acre Research Triangle Park, the Research Triangle Institute (a Universities' subsidiary), and the Triangle Universities Computation Center, a central facility for the extensive computing activities of the institutions.

The University's total enrollment is more than 24,500, including approximately 17,000 undergraduate students, 3,500 graduate students, 3,400 Lifelong Education students and 600 students in other special categories. The student population is made up of approximately 15,300 men and 9,200 women including more than 3,000 black or other minority students. Students come to N. C. State from nearly every state in the union and at least 91 foreign countries are represented by more than 1,000 international students.

North Carolina State University is committed to equality of educational opportunity and does not discriminate against applicants, students, or employees based on race, color, national origin, religion, sex, age, or handicap. Moreover, North Carolina State University is open to people of all races and actively seeks to promote racial integration by recruiting and enrolling a larger number of black students.

NCSU is a member of the National Association of State Universities and Land-Grant Colleges, the American Council on Education, and the American Council of Learned Societies.

THE SUMMER SESSIONS

The Summer Sessions at North Carolina State University offer an extensive educational program planned to meet the varied needs and interests of approximately 13,000 students. Sixty departments offer instruction in more than 700 courses, approximately 90% of which are at the undergraduate level.

Each of the University's nine schools, with a combined faculty of more than 500, participates in the Summer Sessions. The schedule includes two "regular" five-week sessions and a ten-week session, as well as several dozen evening courses scheduled for the convenience of working adults.

Summer courses and special programs are designed for the new student, the undergraduate wanting to advance his or her academic standing at State, the graduate desiring to continue study and research during the summer months and for visiting students pursuing degrees at other institutions. Teachers who need to earn credit toward renewal of teaching certificates or advanced degrees in education and persons in professional fields who wish to keep abreast of new developments and trends also take advantage of State's summer programs.

ADMISSIONS

North Carolina State University is committed to equality of educational opportunity and does not discriminate against applicants, students, or employees based on race, color, national origin, religion, sex, age, or handicap. Moreover, North Carolina State University is open to people of all races and actively seeks to promote racial integration by recruiting and enrolling a larger number of black students.

Students are admitted to the summer sessions in one of seven categories: 1) new freshmen, 2) new undergraduate transfer students, 3) new graduate students, 4) Lifelong Education students, 5) continuing North Carolina State University students, 6) former North Carolina State University students, and 7) suspended North Carolina State University students.

NEW FRESHMEN

Application forms for new freshmen should be obtained from the Dean of Admissions, NCSU, Box 7103, Raleigh, North Carolina 27695-7103. The Summer Sessions application form in this bulletin should *not* be completed. Applications should be submitted in the fall of the senior year in high school. The application deadline is May 1. Based on past experience, applications and credentials received in the fall and early winter have received full consideration while those applications received later may be subject to a waiting list. A freshman applicant should be a graduate of an accredited secondary school. Nongraduates should have a high school equivalency certificate. The following high school preparation, or its equivalent, is necessary: English, 4 units; history or social studies, 2 units; mathematics, 2 units in algebra, 1 unit in geometry, and 1 unit in advanced math is strongly recommended for the Schools of Engineering, Physical and Mathematical Sciences, and Forest Resources; science, 2 units, preferably biology, chemistry, or physics; foreign language, 2 units recommended but not required, for the School of Humanities and Social Sciences only.

Freshman applicants must take the Scholastic Aptitude Test of the College Entrance Examination Board. These scores, together with the high school record, will be considered in determining admissibility. Information as to the

time and place at which the Scholastic Aptitude Test will be given may be obtained from high school guidance counselors, or by writing directly to the College Entrance Examination Board, Box 592, Princeton, New Jersey 08540 for the *Bulletin of Information*. The *Bulletin* includes an application form and is available without charge.

Although the Achievement Test scores are not used in the admission decision, the English and Math Level I Tests are recommended for proper course placement. Additional information concerning these tests may be obtained by contacting the Undergraduate Admissions Office (919-737-2434).

NEW TRANSFER STUDENTS

Students seeking transfer admission into a degree program should obtain an application from the Office of Undergraduate Admissions and submit it before May 1. These students should not complete the Summer Sessions application in this bulletin.

Priority will be given to students presenting 60 or more semester hours of "C" or better work on courses which are applicable to the degree program to which they are applying. The minimum overall grade point average required for transfer admission is 2.0; programs which are experiencing space limitations require a higher GPA.

Individual official transcripts must be submitted from each institution attended. Students must be eligible to return to the last institution attended. College credits must have been earned at an accredited institution and should include a college-level math or the high school record must be submitted to show proper background.

NEW GRADUATE STUDENTS

All students working towards advanced degrees are enrolled in the Graduate School. An application for admission may be obtained from the Dean of the Graduate School, Box 7102, NCSU, Raleigh, North Carolina 27695-7102.

STUDENTS ADMITTED TO THE FALL SEMESTER

Any student accepted for regular admission for the fall semester wishing to attend either summer session should notify the Admissions Office, to change the date of entrance. He or she should *not* complete a Summer Sessions application.

LIFELONG EDUCATION STUDENTS

Lifelong Education students must complete the Summer Sessions Registration Application in the front of this bulletin. A Lifelong Education student is one who has never been formally admitted as a degree candidate at North Carolina State University. All students visiting from other schools will be classified as Lifelong Education students.

Lifelong Education Students—Undergraduate Studies (UGS)—This classification is used for individuals who have not obtained a baccalaureate degree and who wish to take courses but who are not currently admitted to a degree program.

To be eligible for acceptance as an Undergraduate Lifelong Education Student, for the Summer Sessions an individual should:

- a. have acquired a high school diploma or GED certificate; and
- b. not be a degree candidate at North Carolina State University; or
- c. be a high school student who has been recommended by his/her school and approved by the Office of Admissions to take lower level courses.

Post-Baccalaureate Studies (PBS)—The Post-Baccalaureate Studies (PBS) classification is designed for U.S. citizens who wish to undertake academic work beyond the baccalaureate degree but who are not currently admitted to a degree program. This classification is not open to foreign nationals with the exception of the spouse of a regularly enrolled NCSU student. In special cases where students are sponsored by an agency of the U. S. Government for specialized, non-degree study, approval may be given by the Graduate School for registration in the Post-Baccalaureate Studies classification. The following policies apply to students who wish to register for PBS:

1. All must have baccalaureate degrees from accredited institutions of higher education.
2. All classes taken for credit by PBS students will be graded in the usual manner that applies for the particular course (A, B, C, D, NC or S, U). All courses taken at NCSU will show on the student's transcript. If the student is admitted as a graduate student, a maximum of nine hours may apply toward the minimum requirements of the degree for which the student is enrolled. Only the *first* nine hours of course work taken at the graduate level in the PBS category can be accepted toward degree requirements unless a request for some other combination of nine hours is made by the student's advisory committee and approved both by the School Dean and the Graduate Dean.
3. The Grade Point Average (GPA) of a graduate student who has credits in the PBS category will be based on all courses taken at the 400-600 level. However, no course taken six (6) years prior to enrollment into a program will be considered in the GPA calculation.
4. Registration is limited to a maximum of two courses per session. Individuals who are employed fulltime should limit their PBS registration to one course per session.
5. The PBS classification carries with it no implication that the student will be admitted to the Graduate School in any degree classification.
6. All course work accepted for degree credit must be approved by the student's advisory committee as being germane to the program. Requests for degree credit for courses completed in the PBS classification are considered after admission to a graduate degree program when the student's Plan of Graduate Work is filed with the Graduate School.
7. PBS students are expected to familiarize themselves with Graduate School policies and to seek further advice or clarification as needed.

Limitations—Persons found eligible to study as Lifelong Education students are not to assume that they have received formal admission to the University as either undergraduate or graduate degree candidates. To become a degree candidate, formal application must be made through the Undergraduate Admissions Office or the Graduate School. Undergraduate Lifelong Education students may not register for more than two academic courses plus one physical education course per summer session.

Course Availability—Persons found eligible may register for any course offered by the University, provided they satisfy the required course prerequisites and classroom space is available.

Academic Standards—The academic standards applicable to undergraduate students at the University also apply to Lifelong Education students.

CONTINUING NCSU DEGREE STUDENTS

Any regular NCSU degree candidate may attend the Summer Sessions. The *Summer Sessions application in this bulletin must not be completed*, but registration procedures as listed on page 13 must be followed.

READMISSION OF FORMER NCSU DEGREE STUDENTS

Former NCSU degree students who wish to attend the Summer Sessions must apply for readmission through Registration and Records at least 30 days prior to the intended date of return. The readmission application may be obtained by writing to the Department of Registration and Records, NCSU, Box 7313, Raleigh, N.C. 27695-7313. *The Summer Sessions application in this bulletin must not be completed*, but registration procedures as listed on page 13 must be followed.

SUSPENDED NCSU DEGREE STUDENTS

NCSU degree students suspended at the end of the spring semester, 1987, may attend one or both sessions of the Summer Sessions to become eligible to continue in the fall. *The Summer Sessions application in this bulletin must not be completed*, but registration procedures as listed on page 13 must be followed. Students suspended prior to the spring semester, 1987, may attend one or both sessions of the Summer Sessions but should follow readmission procedures. The readmission application may be obtained by writing the Department of Registration and Records, NCSU, Box 7313, Raleigh, N.C. 27695-7313.



REGISTRATION PROCEDURES

PREREGISTRATION

All students who plan to attend the Summer Sessions must preregister. Pre-registration consists of selecting the courses to be taken during the Summer Sessions and filing a Preregistration Schedule Request Form with Registration and Records. Each student who preregisters will be allowed to *complete registration by mail* if tuition and fees have been paid by the deadline. The preregistration period for all students will begin on Monday, March 23, 1987. The deadlines for preregistration will be:

First Summer Session and the Ten-Week Session—Friday, April 3, 1987

Second Summer Session—Thursday, May 14, 1987

Currently enrolled degree students will preregister for the Summer Sessions at the time they preregister for the 1987 fall semester.

Former degree students returning may preregister for the Summer Sessions after they have filed an application for readmission and have received their letters of approval.

New freshmen and new transfer degree students may preregister for the Summer Sessions after they have received their letter of approval. New students who desire to attend the Summer Sessions should contact the Admissions Office.

Lifelong Education (non-degree) students will preregister for the Summer Sessions by completing the Summer Sessions Registration Application in the front of the Summer Sessions Bulletin and filing this with the Summer Sessions Office by mail or in person.

REGISTRATION BY MAIL FOR ALL PREREGISTERED STUDENTS

All students (undergraduate degree, graduate degree, and Lifelong Education (non-degree) students) who have preregistered will complete registration by mail if tuition and fees have been paid by the deadlines:

First Summer Session and the Ten-Week Session—Tuesday, May 5, 1987

Second Summer Session—Tuesday, June 16, 1987

No class schedule will be mailed if tuition and fees are not paid in full by these deadlines. Class schedules will be mailed approximately one week prior to the beginning of classes to the student's mailing address. It is *very important* that all students notify the Department of Registration and Records of any address changes. Class schedules returned by the U.S. Postal Service because of an improper address should be picked up in 100 Harris Hall by Registration/Change Day:

First Summer Session and the Ten-Week Session—Monday, May 18, 1987

Second Summer Session—Monday, June 29, 1987

Degree Students should check with the Department of Registration and Records, telephone (919) 737-2572.

Lifelong Education students (non-degree) should check with the Division for Lifelong Education, McKimmon Center, telephone (919) 737-2265



If a student fails to pick up a returned class schedule, the University will assume that the student does not wish to complete registration and the student's schedule will be CANCELLED.

Remember

There are three IMPORTANT steps required for a student to complete registration:

- 1) Preregister by the deadline:
First Summer Session and Ten-Week Session—Friday, April 3, 1987
Second Summer Session—Thursday, May 14, 1987
- 2) Pay tuition and fees and *all* other debts to the University by the deadline:
First Summer Session and Ten-Week Session—Tuesday, May 5, 1987
Second Summer Session—Tuesday, June 16, 1987

NOTE: Holds placed on class schedules could be a result of parking fines, library fines, gym clothes not returned to the PE department, or other outstanding fees owed to departments that the student has not paid. Students are encouraged to check with the Cashiers Office (Student Accounts) if they believe that a hold on their class schedules could exist. It is the student's responsibility to clear all obligations to the University.

- 3) Obtain a class schedule and registration card. Class schedules will be *mailed* to the student's Permanent Address approximately one week prior to Registration/Change Day.

Cancellation Policy

All class schedules not mailed because of a University Hold will be automatically cancelled.

PAYMENT DEADLINES

First Summer Session and the Ten-Week Session—May 5, 1987
Second Summer Session—June 16, 1987

REGISTRATION FOR NON-PREREGISTERED STUDENTS

All students will report to Reynolds Coliseum with a "Permit to Register." The "Permit to Register" may be obtained at the appropriate office according to the following categories:

Continuing Degree Students (students who were registered or withdrew during the 1987 spring semester)—Report to Room 100, Harris Hall, and request a "Permit."

Re-entering Degree Students (students who previously attended NCSU but were not enrolled during the 1987 spring semester)—Report to Room 100, Harris Hall, complete a Readmission Application and obtain a "Permit."

New Undergraduate Degree Students (never attended NCSU)—Report to the Admissions Office, 107 Peele Hall and obtain a "Permit."

New Graduate Degree Students (never attended NCSU)—Report to the Graduate Office, 104 Peele Hall and obtain a "Permit."

Lifelong Education Students (non-degree)—Report to the Division for Lifelong Education, McKimmon Center and complete a Lifelong Education Student Application Form and obtain a "Permit."

All students will be admitted to the Coliseum from 8:30 a.m. to 12:00 noon on the Registration dates indicated below:

First Summer Session and the Ten-Week Session—May 18, 1987

Second Summer Session—June 29, 1987

ALLCAMPUS I.D. CARDS

North Carolina State University implemented a new permanent photo I.D./registration card program in Spring 1987 called the AllCampus Card. The AllCampus card is used to gain access to various campus activities including: D. H. Hill Library, Clark Infirmary, physical education activities, Student Accounts, athletic events, and University Dining's meal plan program. The AllCampus card is also the card used by Diner's Friend depositors to access their funds at University Dining locations, the Students Supply Stores, the Laundry, and Parking Services.

Students continuing their studies during the Summer Sessions will use the card they currently possess. New students can have their pictures taken and AllCampus cards made during preregistration week, March 23-26 at 217 Harris Hall from 8:00 a.m.-7:00 p.m. and March 27 from 8:00 a.m.-5:00 p.m. On summer session Registration/Change days, May 18 and June 29, AllCampus cards will be made and issued at Reynolds Coliseum from 8:30 a.m.-12:00 noon. Additional dates for photographing new students are May 19 and 20 and June 30 from 8:00 a.m.-7:00 p.m. at 217 Harris Hall.

Lost/stolen AllCampus cards can be replaced any regular business day at 217 Harris Hall from 8:00 a.m.-5:00 p.m. There is a nonrefundable \$15.00 service charge for this replacement card.

WITHDRAWAL FROM THE UNIVERSITY

A regularly enrolled student who finds it necessary to drop all courses will initiate withdrawal from the University at the Counseling Center, 200 Harris

Hall. A Lifelong Education student in the same circumstance initiates withdrawal from the University at the Summer Sessions Office, McKimmon Center, Gorman Street and Western Boulevard. A student who withdraws will not have any grades recorded. A student who discontinues attending classes without officially withdrawing will receive all "NC" grades.

After a short period (four days) during which it is possible to withdraw with a refund of fees (less a registration fee), there is a period during which a student may withdraw but without refund. The withdrawal deadline for undergraduates (regularly classified and Undergraduate Lifelong Education students) corresponds to the last day to drop a course at the 400-level or below; for graduate students (including Post-Baccalureate students) the deadline for withdrawal corresponds to the last day to drop 500- or 600-level courses. (See the appropriate Summer Sessions Calendar for dates.) After the published deadlines, there is no withdrawal except for unusual circumstances which can be documented as, for example, extended illness. Under these circumstances a student may petition the *Fee Appeals Committee* for a prorated refund of tuition and fees.

SPECIAL NOTES

1. Tuition and fees are payable by check or cash before or on the day of registration. Advanced billing of tuition and fees will be made *only* for those students who preregister. Payment is requested by May 5, 1987 for the First Summer Session and Ten-Week Session and June 16, 1987 for the Second Summer Session.
2. Students planning to take courses in both the First and Second Sessions should plan their sequences well in advance. Offerings in the Second Session are often substantially less in number than in the First Session, and in some instances, departments do not offer courses in both summer sessions.
3. Everything possible will be done to insure that the courses listed in this bulletin will be given at the time indicated. *However, the Director of Summer Sessions reserves the right to cancel courses in which enrollment is deemed insufficient.*
4. The maximum load for either session of the Summer Sessions is two academic courses plus a PE course for undergraduates and six hours for graduates. Any student may carry less. Regularly enrolled students who desire to carry *more* than seven hours must obtain the approval of the Dean of the school in which they are enrolled. Students visiting from other schools who wish to take more than the maximum must obtain the approval of the Director of Summer Sessions.
5. *All Lifelong Education students (including those from other universities and colleges) are advised that NCSU degree students are always given priority for Summer Sessions classes. Acceptance of the Registration Application for Lifelong Education students by the Summer Sessions Office in no way constitutes a guarantee that class space will be available.*

NONDISCRIMINATION POLICY

North Carolina State University is dedicated to equality of opportunity within its community. Accordingly, North Carolina State University does not practice or condone discrimination, in any form, against students, employees, or applicants on the ground of race, color, national origin, religion, sex, age, or handicap.

North Carolina State University commits itself to positive action to secure equal opportunity regardless of those characteristics.

North Carolina State University supports the protection available to members of its community under all applicable Federal laws, including Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Sections 799A and 845 of the Public Health Service Act, the Equal Pay and Age Discrimination Acts, the Rehabilitation Act of 1973, Vietnam Veteran's Readjustment Assistance Act of 1974, and Executive Order 11246. For information concerning these provisions, contact:

Dr. Lawrence M. Clark
Associate Provost and University Affirmative Action Officer
Box 7101
North Carolina State University
Raleigh, North Carolina 27695-7101
Phone: (919) 737-3148

PLANNING TO GRADUATE. . . .

If you plan to graduate at the end of the Summer Sessions, there are a number of items that should be of interest to you.

1. You should submit an Application for Degree card for *each* degree you are to receive. This should be turned in to your department within two weeks after the beginning of the Session. If for any reason you submitted an Application for Degree card last semester, but did not graduate, it is necessary that you submit *another Application* for the Summer Sessions. Remember: If you are to receive two degrees, you must submit a separate application for each degree.
2. Your local address and your official University correspondence address should be kept up-to-date. Also, the address you show on your Application for Degree card will be the address to which your diploma is mailed and also the address to which any further correspondence from this University will be sent. Any changes should be made by reporting the new address to the Department of Registration and Records, 100 Harris Hall, Box 7313, Raleigh, NC 27695-7313.
3. If you are transferring hours from another university in order to graduate, this should be done before the end of the Summer Sessions. If you are enrolled at another institution and that institution is unable to furnish an official transcript by the end of this Session, you must have that university's Registrar send to the Department of Registration and Records a letter showing the course and grade with an official school seal and Registrar's signature. This letter must be received by the end of the Summer Session.
4. Correspondence course grades must be received, all incompletes and late grades cleared, and all fines and fees paid by the end of the Summer Session.
5. If you are eligible to take reexamination, it must be taken no later than 30 days after the date of the intended graduation.
6. If you would like to participate in the May, 1988 commencement exercises, contact your school Dean's office at your earliest convenience. You will be

placed on a mailing list to receive all necessary information about the graduation activities. Graduation exercises are scheduled for May 7, 1988.

If you have any questions concerning the above information, please call Arlene Richardson, Supervisor of Records, Department of Registration and Records, 100 Harris Hall, telephone (919) 737-2572.

ACADEMIC REGULATIONS

North Carolina State University's grading system for recording academic achievement is:

DEFINITION OF LETTER GRADES AND GRADE POINTS

<i>Grade</i>	<i>Definition</i>	<i>Grade Points Per Credit Hour</i>
A	Excellent	4
B	Good	3
C	Satisfactory ("Passing" for graduate students)	2
D	Marginal	1
NC	No Credit	0

(The following grades are not used in the calculation of grade point averages.)

S	Satisfactory (Credit-only and certain other courses)
U	Unsatisfactory (Credit-only and certain other courses)
CR	Credit by Examination or Advanced Placement
IN	Incomplete
LA	Temporarily Late
AU	Audit
NR	No Recognition Given for Audit
W	Withdrawal or Late Drop

Questions concerning this grading system should be directed to James H. Bundy, University Registrar, NCSU, Box 7313, Raleigh, N.C. 27695-7313.

EXPENSES

TUITION AND FEES RATE SCHEDULE—1987 SUMMER SESSIONS

Undergraduates

Residents of North Carolina				Nonresidents			
<i>Hours</i>	<i>Tuition</i>	<i>Required Fees</i>	<i>Total</i>	<i>Hours</i>	<i>Tuition</i>	<i>Required Fees</i>	<i>Total</i>
0-5	\$ 60	\$56	\$116	0-5	\$ 478	\$56	\$ 534
6-8	120	56	176	6-8	955	56	1,011
9-11	180	56	236	9-11	1,433	56	1,489
12+	240	56	296	12+	1,910	56	1,966

Graduate Students

Residents of North Carolina

<i>Hours</i>	<i>Tuition</i>	<i>Required Fees</i>	<i>Total</i>
0-Thesis	\$110	\$ 6	\$116
0-2	60	56	116
3-5	120	56	176
6-8	180	56	236
9+	240	56	296

Nonresidents

<i>Hours</i>	<i>Tuition</i>	<i>Required Fees</i>	<i>Total</i>
0-Thesis	\$ 340	\$ 6	\$ 346
0-2	478	56	534
3-5	955	56	1,011
6-8	1,433	56	1,489
9+	1,910	56	1,966

School of Veterinary Medicine

Residents of North Carolina

<i>Hours</i>	<i>Tuition</i>	<i>Required Fees</i>	<i>Total</i>
0-2	\$134	\$56	\$190
3-5	268	56	324
6-8	401	56	457
9+	535	56	591

Nonresidents

<i>Hours</i>	<i>Tuition</i>	<i>Required Fees</i>	<i>Total</i>
0-2	\$ 589	\$56	\$ 645
3-5	1,179	56	1,235
6-8	1,768	56	1,824
9+	2,357	56	2,413



SPECIAL REGISTRATION AND FEES

A. Thesis Preparation (GR 598 or GR 698), Dissertation Research (GR 697), Examination Only (GR 597), and Summer Research (GR 596S or GR 696S) are all charged the 0-Thesis rate.

B. Cooperative Education Fee \$115

C. Audits Rates same as for credit

Note: The tuition and fees charge is assessed according to the total hours and courses carried as of 5:00 p.m. on:

—Monday, May 25, 1987, for the First Summer Session and Ten-Week Session.

—Monday, July 6, 1987 for the Second Summer Session.

* Tuition and fees for the 1987 Summer Sessions are tentative rates and are subject to change.

NOTICES

1. A statement of tuition and fees is mailed to each preregistered student around 20-30 days before the beginning of each Summer Session. The statement must be returned with full payment or complete financial assistance information by May 5, 1987 for the First Summer Session and the Ten-Week Session and by June 16, 1987 for the Second Summer Session. Nonpreregistered students are required to pay tuition and fees at registration. Deferred payments will not be allowed during the Summer Sessions.
2. Required fees are included in the rates listed above and must be paid by all students. Students are entitled to the services, facilities, and programs offered by the Student Center, Health Services, Physical Education Department, and Athletics Department. An itemization of required fees will be provided upon request.
3. Upon adding course work that results in an increased fee, students should pay at Reynolds Coliseum on Registration/Change Day and at 2 Peele Hall thereafter. Refunds resulting from courses dropped can be obtained by presenting the official drop form at 2 Peele Hall.
4. All students enrolled in courses designated as requiring student use of University, School, or Departmental computing resources during class or laboratory sessions or as homework assignments will be charged a computer course fee of \$15 per Summer Session. Similarly, all students enrolled in courses designated as requiring student use of University, School, or Departmental laboratory resources will be charged a laboratory course fee of \$15 per Summer Session. The maximum course fee to be charged to any student will be \$30 per Summer Session regardless of the computer and/or laboratory courses taken. This fee will *not* be waived when a designated lab or computer fee course is dropped *after the official enrollment date*. (Official enrollment dates are stated at the end of the following listing of designated courses.)

**COURSES REQUIRING COMPUTER OR LABORATORY
COURSE FEES
SUMMER SESSIONS, 1987**

ANS(PO) 204	CSC 202E	FLS 101	MAT 200
	CSC 252E	FLS 101E	MAT 210
ARC 400	CSC 302	FLS 102	MEA 110
	CSC 311	FLS 201	
BCH 554	CSC 311E	FLS 201E	NE 202
	CSC 312		
BO 200	CSC 417	FOR 111	PD 400
BO(ZO) 365	CSC 431E	FOR 204	
	CSC 461	FOR 261	PO(ANS) 204
BS 100	CSC 461E	FOR 264	
BS 510	CSC 499	FOR 274	PS 371
		FOR(FW) 310	
CE 382	CSE 452	FOR 491	PY 205
	CSE 452E	FOR 591	PY 208
CH 101	CSE 453	FOR 691	PY 211
CH 103	CSE 453E	FOR 692	PY 212
CH 104	CSE 699	FOR 699	PY 231
CH 107			
CH 221	DN 251	FW(FOR) 310	SOC 416
CH 223	DN 254		
CH 315		HS 371	T 250
CH 499	ECE 213	HS 400	T 301
	ECE 214		
CHE 205	ECE 301	IA 115	VD 400
CHE 225	ECE 302	IA 122	
		IA 351	WPS 205
CSC 101E	FLF 101		WPS 491
CSC 102	FLF 101E	IE 351	
CSC 102E	FLF 102	IE 361	ZO 201
CSC 111	FLF 102E		ZO 303
CSC 200X	FLF 201	LAR 698	ZO(BO) 365
CSC 200Y			
CSC 201	FLG 101	MAE 305	
CSC 201E	FLG 102	MAE 306	
	FLG 201	MAE 435	

Course fees will be assessed for courses officially carried at 5:00 p.m. on Monday, May 25 for the First and Ten-Week Sessions; Monday, July 6 for the Second Session.

RESIDENCE STATUS CLASSIFICATION FOR TUITION PURPOSES

To qualify as a resident for tuition purposes, a person must have established legal residence (domicile) in North Carolina and maintained that legal residence for at least twelve months immediately prior to his or her classification as a resident for tuition purposes. To be eligible for classification as a resident for

tuition purposes a person must establish that his or her presence in the State is, and during the requisite twelve month qualifying period was, for purposes of maintaining a bona fide domicile rather than of maintaining a mere temporary residence or abode incident to enrollment in an institution of higher education.

North Carolina General Statute (G. S.) 116-143.1 is the governing law concerning resident status classification and sets forth statutory definitions, rules and special provisions for determining resident status for tuition purposes. Copies of the law and implementing regulations are found in *A Manual to Assist the Public Higher Education Institutions of North Carolina in the Matter of Student Residence Classification for Tuition Purposes* which is available for inspection in the Office of Undergraduate Admissions, 112 Peele Hall. Special situations concerning minors, the military, and marriage as they relate to residence status classification are addressed in *The Manual*. It is the student's responsibility to initiate a review of their situation when classification or re-classification as a resident for tuition purposes is sought.

Active military personnel assigned to North Carolina and their military dependents may be eligible to receive the benefit of the in-state tuition rate under G.S. 116-143.3. A student who qualifies for the in-state tuition rate under this statute is not considered a resident, but merely eligible for the benefit of the in-state tuition rate. Application for eligibility to be charged the in-state tuition rate under G.S. 116-143.3 must be made prior to initial enrollment or re-enrollment for which the student claims the benefit. Further application for such eligibility must similarly be made prior to the outset of each successive academic year of enrollment.

Questions concerning residence status classification should be addressed to the Dean of Undergraduate Admissions, North Carolina State University, Box 7103, Raleigh, North Carolina 27695-7103, (919) 737-2434

REFUND OF TUITION AND FEES

A student who withdraws from school on or before May 25 for the First and Ten-Week Sessions or July 6 for the Second Session will receive a refund of the full amount paid, less a \$15 registration fee. After the dates specified, no refunds will be made.

In some instances, circumstances justify waiving rules regarding refunds. An example might be withdrawal from the University because of illness. Students have the privilege of appeal to the Fee Appeals Committee when they feel special consideration is merited. Application for such appeals may be secured from the Department of Registration and Records (100 Harris Hall), Summer Sessions Office (McKimmon Center), or University Cashier and Student Accounts Office (2 Peele Hall).

FINANCIAL AID

The financial aid available to regular students attending the Summer Sessions is ordinarily limited to loans and work-study jobs. Students who wish to be considered for financial aid should make application to the Financial Aid Office, Peele Hall, as far in advance as possible, preferably no later than April 1. Summer applications will be available in early March.

The University has no financial aid for summer visitor students. However, these students may have access to the part-time job listings on the bulletin board outside the Financial Aid Office, 2nd Floor, Peele Hall.



COUNSELING

The Counseling Center provides services designed to assist individuals in gaining a better understanding of themselves and their opportunities. Professional counselors are available to work with students who desire assistance with concerns such as: choosing a career; planning an academic program leading to a career; identifying and overcoming educational difficulties; developing greater self-understanding; and developing more satisfying personal relationships. All counseling is strictly confidential.

In addition to individual counseling, workshops are offered throughout the year in a variety of areas, including vocational exploration, study skills, and anxiety-reduction.

Counseling services are available without cost to NCSU students. Appointments may be scheduled over the telephone (919)737-2423 or in person by coming to 200 Harris Hall.

HOUSING

RESIDENCE HALLS

During the 1987 Summer Sessions, housing will be provided in the residence halls on a first-come, first-served basis for men and women who are enrolled for one or more courses.

Assignment to a room for a Summer Session does not guarantee that a room will be available for the Fall Semester. A student must be accepted by NCSU for Fall enrollment as a full-time student to be eligible to apply for University housing.

ROOM RENTALS AND APPLICATIONS

The rental rate for a five-week Session is \$150.00 per person in a double room. *If space is available*, a single room may be reserved for \$210.00 each Session. To obtain an assignment, the student must complete the housing request card and return it with a check to the University Cashier and Student Accounts Office, NCSU, Box 7213, Raleigh, N.C. 27695-7213. The room assignment will be mailed if time permits, or may be picked up at the Housing Assignments Office in Harris Hall on the day the residence halls open for the session.

Residents will be permitted to change rooms after the first week of classes with the approval of the Housing Assignments Office. The room change fee is \$5.00. *Opening days of the residence halls will be as follows:*

FIRST SESSION—10:00 a.m., Sunday, May 17, 1987

SECOND SESSION— 10:00 a.m., Sunday, June 28, 1987

HOUSING REFUND POLICY

Cancellation of a room reservation must be made in writing as follows:

- (a) In person at the Housing Assignments Office in Harris Hall, Monday through Friday, between 8:00 a.m. and 5:00 p.m., on the cancellation form provided; or
- (b) By mail addressed to the Housing Assignments Office, Box 7315, NCSU, Raleigh, N.C., 27695-7315.

The effective date of cancellation is the date notification is received at the Housing Assignments Office or the date the room is vacated, whichever is later. Residents who have moved out of their rooms must return their Check-Out Card to the Housing Assignments Office to avoid a charge for an improper check-out.

If the housing agreement is cancelled on or before Registration/Change Day, the rental fee paid will be refunded less a \$25 processing fee. *If the housing agreement is cancelled AFTER 5:00 p.m. on Registration/Change Day, NO REFUND of room rent will be made.* In cases of medical withdrawals, however, a \$25 processing fee will be charged plus \$3.00 per day from date of occupancy.

If a student fails to check in and secure his/her keys by 5:00 p.m. on Registration/Change Day, the housing agreement will be cancelled and NO REFUND will be made except as stated above.

STUDENT FAMILY HOUSING

The University operates E.S. King Village as an apartment complex for students with families. This complex consists of 300 apartments (120 efficiency, 148 one-bedroom, and 32 two-bedroom). Interested students should write to Student Family Housing, NCSU, Box 7315, Raleigh, N.C., 27695-7315, for family housing applications and information.

FRATERNITY HOUSES

Several of the 20 fraternity houses located on or adjacent to the campus provide housing for Summer Sessions students. Twelve of the 20 houses are fully air-conditioned and all provide furnished rooms and living areas. In addition, some houses offer board plans during the summer months. Any student interested in further details should write to the Office of Student Development, Box 7314, NCSU, Raleigh, N.C., 27695-7314 or telephone (919) 737-2441.

D. H. HILL LIBRARY

The libraries of North Carolina State University contain more than 1,200,000 volumes of books and bound journals, 620,000 federal government publications, and 2,500,000 microforms. The collection is especially strong in the physical and biological sciences, agriculture, textiles, architecture and design. The D. H. Hill Library houses the vast majority of these publications and subscribes to over 9,400 periodicals. Five branch libraries—the School of Textiles Library in Nelson Hall, the Design School Library in Brooks Hall, the School of Forest Resources Library in Biltmore Hall, Veterinary Medical Library in the School of Veterinary Medicine, and the Curriculum Materials Center in Poe Hall—serve the special needs of their schools.

The D. H. Hill Library has been a depository for U. S. government publications since 1924 and receives over 97% of these publications. The library also receives the microfiche research reports published by the Department of Energy (DOE), the National Aeronautical and Space Administration (NASA), the Educational Resources Information Center (ERIC), and the National Technical Information Service (NTIS).

On-line computer-based literature searching is offered by the library from a number of data bases such as ERIC, AGRICOLA (Bibliography of Agriculture), Psychological Abstracts, Sociological Abstracts, BIOSIS (Biological Abstracts), and Nuclear Science Abstracts. Only direct costs are charged to the user.

Facilities and equipment are also available for both individual and group use of audiovisual media. The library's theater can be scheduled for group media presentations, and films in the State Library's film collection can be borrowed by the D. H. Hill Library's Media Center for academic use by faculty and students.



The scholar, student, and browser will each discover the materials and services of the library to be useful and enjoyable additions to his or her Summer Sessions program. All areas of the library complex are air-conditioned and open to students and faculty.

Library hours for the Summer Sessions are as follows:

Monday-Thursday	7:45 a.m.-12:00 midnight
Friday	7:45 a.m.- 9:30 p.m.
Saturday	9:30 a.m.- 6:00 p.m.
Sunday	1:00 p.m.-12:00 midnight

SUMMER ACTIVITIES

Through many curricular and extracurricular activities, the Summer Sessions provide special opportunities to those students engaged in summer study. Interesting, informative and entertaining programs and activities are scheduled for each session.

A few of the more popular activities and special features include the Carmichael Gym athletic and recreation programs and the varied activities sponsored by the University Student Center.

The University's regular program of student personnel services is available to summer students. It includes the Counseling Center for educational, career and personal counseling; the Career Planning and Placement Center for career planning and placement; the Residence Life and Residence Facilities offices for residence quarters; the Financial Aid Office for financial assistance; and the Student Health Service for medical care.

Beyond the campus, the city of Raleigh offers cultural and recreational opportunities of interest to students. The Raleigh Little Theater presents several productions during the summer, the North Carolina Museum of Art sponsors gallery concerts and exhibits, and there are several swimming pools and city and state parks located in and around Raleigh.

UNIVERSITY STUDENT CENTER

The hub of campus summer activity is the University Student Center. The Center is supported in part by student fees, and all Summer Sessions students are invited to attend the programs and activities sponsored by the Summer Programs Board. These programs include movies and a variety of social and recreational events.

The air-conditioned Center offers many facilities, including a television lounge, an art gallery, offices for student organizations, a game room, snack bar, theater and meeting rooms. The Craft Center in the Thompson Building has a full range of crafts programs.

University Student Center hours during the summer are:

Monday-Friday	7:00 a.m.-11:00 p.m.
Saturday-Sunday	9:00 a.m.-11:00 p.m.

SPECIAL COURSES AND INSTITUTES

NCSU MIDDLE SCHOOL WORKSHOP—"ALTERNATIVES FOR THE MIDDLE YEARS"

(Listed as ED 598-F)

June 15-June 26

This eighth annual activity-oriented workshop is designed to help teachers and administrators develop humane and imaginative programs for students ages 10-15. It will focus upon (a) the developmental needs, interests, and abilities of emerging adolescents; (b) curriculum ideas and teaching methods; and (c) school organization strategies.

Participants will be involved in whole group activities and mini-courses which explore topics such as:

Adolescence and contemporary society

Team organization

Advisor/advisee programs

Learning styles

Interdisciplinary inquiry

Arts and the adolescent

Learning environment/classroom design

Creativity and the right side of the brain

Competition and cooperation

Case studies of outstanding schools

Outdoor education

Adolescent sexuality

Moral development and values clarification

Adolescence and authority

Cognitive and social development in adolescence

All school activities

Learning games and simulations

The principal as educational leader

In addition, special electives will be offered in math, science, language arts, and social studies.

Emphasis in most sessions will be placed on activity, involvement and sharing. Films, slides, simulations, small group discussions, working with classroom materials, and a variety of other learning techniques will be utilized.

The workshop will be directed by John Arnold, Coordinator of Middle Years Education at NCSU, and Chris Stevenson, Curriculum Specialist, University of Vermont. Consultants from the State Department of Public Instruction and from area schools will serve on a part-time basis.

Sessions will meet Monday through Friday from 9:00 a.m. to 3:30 p.m. Three graduate credits will be granted to those who participate satisfactorily and complete a curriculum project. Also, 5.5 CEU credits will be awarded by the State Department of Public Instruction.

Dormitory rooms ranging from \$8-15 per night per person, double occupancy, will be available for out-of-town participants. Rooms may be reserved by contacting the Housing Assignments Office, NCSU, Box 7315, Raleigh, NC 27695-7315.

To register, contact Dr. John Arnold, Department of Curriculum and Instruction, NCSU, Box 7801, Raleigh, NC 27695-7801, for special registration forms. Or, you may call (919) 737-3221 and request forms from the secretary.

INSTITUTE FOR TEACHERS OF GIFTED AND TALENTED

June 22-July 10

This institute will consist of two courses:

ED 598-Y Special Problems in Curriculum and Instruction: Creativity
&

ED 598-J Special Problems in Curriculum and Instruction: Counseling the
Gifted Individual

Registration for this 3½-week workshop must be completed during the regularly scheduled Preregistration and Registration times for the University's Second Summer Session. For further information, contact: Dr. Lyn Aubrecht, Department of Curriculum and Instruction, NCSU, Box 7801, Raleigh, NC 27695-7801. Phone (919) 737-3221.

INSTITUTE FOR TEACHING VISUALLY IMPAIRED

June 8-June 24

In order to serve the needs of the public school system and other appropriate agencies concerned with services for the visually impaired, two courses are being offered in a shortened session:

ED 536 Structure and Function of the Eye and Use of Low Vision
&

ED 586 Methods and Materials in Visual Impairments

Registration for this 2½-week workshop must be completed during the regularly scheduled Preregistration and Registration times set for the University's First Summer Session. For further information, contact: Dr. Harold Griffin, Department of Curriculum and Instruction, NCSU, Box 7801, Raleigh, NC 27695-7801. Phone (919) 737-3221.

DEVELOPING THINKING SKILLS ACROSS THE CURRICULUM

(Listed as ED 598-V)

July 6-July 31

This course is designed to involve classroom teachers in procedures for developing higher order thinking skills in middle and high school grade students. In addition to covering the historical and theoretical frameworks for the thinking skills movement, instruction will focus on practical applications of strategies to develop these skills in regular classes of content. Participants will be encouraged to apply their understandings to specific learning settings appropriate to their interests.

Registration for this 4-week workshop must be completed during the regular scheduled Preregistration and Registration times set for the University's Second Summer Session. For further information, contact: Dr. Hiller Abernathy, Department of Curriculum and Instruction, NCSU, Box 7801, Raleigh, NC 27695-7801. Phone (919) 737-3221.

TEACHING OF WRITING INSTITUTE

(Listed as ED 598-D)

June 22-July 21

The Capital Area Writing Project (CAWP) at N. C. State University is modeled after the highly successful National Writing Project and is one of eight sites of the North Carolina Writing Project network.

Experienced elementary and secondary teachers of English and other content areas are eligible for the 25 Fellowships available. Applicants should have a marked interest in improving effectiveness in teaching writing and in sharing new knowledge with their colleagues. Participants will agree to conduct inservice programs as Teacher/Consultants within the Region. Applicants from private schools and colleges within Region Three can be considered only if public school applicants do not fill available openings.

Fellows will receive (at no cost) six hours of graduate credit from NCSU in the teaching of writing, a \$400 stipend, and a text of numerous writing activities and successful teaching strategies developed during the four weeks of the project.

Workshop sessions will be held five days per week, Monday through Friday. Mornings will be spent in journal writing, group response and editing. Because of the intensive nature of the workshop and occasional evening activities, dormitory residence during the week is recommended, though not required. Participants will be expected to attend an all-day orientation on Saturday, June 6.

For further information about the Capital Area Writing Project at NCSU, please contact either Dr. Ruie Pritchard (NCSU) at (919) 737-3221 or Dr. Sally Buckner (Peace College) at (919) 832-2881.

HIGHLANDS BIOLOGICAL STATION

The Highlands Biological Station is a regional field station for biological research and education in the Southern Appalachian Mountains. Its facilities are available for use by qualified scientists and graduate students who are engaged in research on the biota and environments of the Southern Appalachian region. The Station is an interinstitutional facility of the University of North Carolina. It is administered by Western Carolina University, located in nearby Cullowhee, a constituent institution of the University of North Carolina. Responsibility for the Station's programs is held by a nine-member Board of Directors that includes representatives from the biology faculties of several southeastern universities. Twenty-one colleges and universities support the Station through institutional memberships. The USDA Forest Service is a cooperating agency.

The Station offers several courses each summer at the advanced undergraduate-graduate level dealing with the special biological features of the southern Appalachians and with areas of study that are appropriate for investigation at a mountain field station. Students have the option of receiving credit for courses through either Western Carolina University or UNC-Chapel Hill. The following courses are being offered in 1987:

Geomorphology of the Southern Appalachians. June 8-13. Two semester hours. Team taught by Drs. P. Gary White and Steven P. Yurkovich (Western Carolina University). The classification, description, origin, and development of land forms of the southern Appalachians. Landforms will be related to rock types, structures, and climates. This course is designed to provide an understanding of geomorphology necessary for the interpretation of the biogeographic features of the southern Appalachian region. Lectures, laboratory, and field exercises. Prerequisites: Introductory geology or permission of the instructor.

Phytoecology of the Southern Blue Ridge. June 15-20. Two semester hours. Team taught by Drs. Dan Pittillo (Western Carolina University) and Peter White (UNC-Chapel Hill). A course emphasizing description of natural ecosystems of the southern Appalachians. Local field trips will provide extensive experience in the variety of natural systems in the region. Classroom discussions will cover vegetational history, grass bald phenomenon, succession, perturbations, and recovery of the natural vegetation. Prerequisites: General ecology, botany, or permission of the instructor.

Forestry and Wildlife Concepts for Biologists. June 22-27. Two semester hours. Dr. Stephen G. Boyce (Duke). A course which emphasizes the relationships between current resource management practices in southern Appalachian forests and the biological effects of these practices. Lecture and laboratory sessions, plus field trips and exercises in field sampling and measurement to be conducted in nearby National Parks, National Forests, and privately managed forests. Prerequisites: University training in biology and ecology, or permission of the instructor.

Fleshy Fungi of the Southern Appalachians. July 20-31. Three semester hours. Dr. Ronald H. Petersen (University of Tennessee). An intensive study of the rich basidiomycete flora of the Blue Ridge and Great Smoky Mountains. Lectures, laboratories and field trips will cover identification, classification, phylogeny, and taxonomic techniques. Prerequisites: General botany, taxonomy, or permission of the instructor.

Field Biology of the Ascomycetes. August 3-14. Three semester hours. Dr. James W. Kimbrough (University of Florida). This course emphasizes the larger, fleshier, more obvious ascomycetes of the southern Appalachians. Lectures, laboratories, and field trips will cover collection, isolation, identification, and taxonomy. Prerequisites: General botany or permission of the instructor.

Registration fees: Western Carolina University, \$15 application fee and \$40 registration fee. UNC-Chapel Hill, \$50 registration fee.

Tuition: \$50/semester hour

Housing: \$20/week

The Highlands Biological Foundation, Inc. offers limited financial aid to qualified students. Further information on specific courses, financial aid, and application forms can be obtained by writing the Executive Director, Highlands Biological Station, P. O. Drawer 580, Highlands, North Carolina 28741 or by contacting Dr. A. W. Cooper, Department of Forestry, N. C. State University. Telephone (919)737-2891.

EVENING SUMMER SESSIONS AND UNDERGRADUATE DEGREE PROGRAMS

Late afternoon and evening classes are scheduled during the First Session (May 18-June 24), Second Session (June 29-August 5), and the Ten-Week Session (May 18-August 3) for the convenience of Evening Degree students, Lifelong Education students and "traditional" day students who have summer jobs but who would like to remain academically active. Many of the evening courses offered in the 1987 Summer Sessions may be used toward fulfilling the basic requirements for a B.A. degree from the School of Humanities and Social Sciences.

The following departments are offering late afternoon and evening classes during the 1987 Summer Sessions: Accounting, Adult and Community College Education, Anthropology, Computer Science, Computer Studies, Counselor Education, Curriculum and Instruction, Economics and Business, English, French, Health Occupations, Mathematics, Mathematics and Science Education, Physical Education, Political Science, Public Administration, Sociology, Spanish and Zoology. Please refer to the Course Listings beginning on page 104 for specific details.

For information concerning the evening degree and certificate programs in the School of Humanities and Social Sciences, contact Ms. Lynda Hambourger, Coordinator of Evening Programs, Room 106 Link Building, or call (919) 737-2467. Ms. Hambourger's office is open until 7:30 p.m. Monday through Thursday and until 5:00 p.m. Fridays.

SUMMER INSTITUTE IN ENGLISH FOR SPEAKERS OF OTHER LANGUAGES

June 29-August 8

The Summer Institute in English for Speakers of Other Languages at North Carolina State University is a six-week, noncredit course of study of the English language and American culture. It is designed for individuals from other countries who intend to pursue university studies or specialized training programs in the United States. With an emphasis on developing competence in all aspects of English language usage, the program includes classroom instruction, use of language laboratories, and extensive opportunities for practicing English in actual communication situations. In addition, opportunities are available for students to become acquainted with life in the U.S. with weekend trips to places of historic, artistic and scenic interest.

Any student who has a score of 400 on the TOEFL (Test of English as a Foreign Language) or an equivalent facility in the use of spoken English may attend the Institute. (Information about taking the test at one of the centers located in the students' home countries may be obtained by writing to: Test of English as a Foreign Language, Educational Testing Service, Princeton, New Jersey.)

Admission to the Institute does not imply admission as a degree candidate at North Carolina State University or any other campus of The University of North Carolina.

The Institute, which is sponsored by the Division for Lifelong Education in cooperation with the Summer Sessions and the Department of Foreign Languages and Literatures, is under the direction of Miss Virginia Prichard of the Department of Foreign Languages and Literatures. All classroom work is conducted on the campus. Classes, including language laboratory practice sessions, are held five and one-half hours a day, Monday through Friday, from 8:00 a.m. to 12:30 p.m. and 1:30 p.m. to 2:30 p.m. (Attendance at the Institute does not carry academic credit, although students who complete the program receive a certificate of attendance.)

The total cost of the six-week program is approximately \$1,700. The cost of the Institute is estimated on the basis of campus dormitory accommodations and meals at the campus cafeterias. Incidental expenses, such as laundry, dry cleaning, entertainment, etc., are not included. (Room rent includes sheets and towels.)

Course and Books/Materials Fees	\$600.00
Room in Campus Dormitory (Estimated)	\$600.00
Food (Estimated)	\$500.00

For further information about the Institute, write to Nancy E. Polk, Program Coordinator, Division for Lifelong Education, NCSU, Box 7401, Raleigh, North Carolina 27695-7401. Telephone (919) 737-2265.

INDEPENDENT STUDY BY EXTENSION

In addition to the classes listed in this schedule, many undergraduate courses are available through independent study (correspondence instruction). This program allows students to enroll at any time, to work at their own pace, and to take up to thirteen months to complete a course. For further information about independent study, including a complete listing of courses, contact Independent Study by Extension, 201 Abernethy Hall 002A, University of North Carolina, Chapel Hill, North Carolina 27514. Telephone (919) 962-1106.



COURSE LISTINGS

Courses are listed by department, departmental abbreviation and numerical designator. Semester hour credits for each course are given following the name of the course. Classes meet daily, Monday through Friday, except where specified to the contrary. The symbols "LR", "LB" and "PR" before the clock hours refer to "lecture-recitation," "laboratory" and "problem-solving session," respectively. If there is no symbol before the clock hours, lecture-recitation is implied.

The number in parentheses to the right of the class meeting time is the "Call Number." This number must be indicated on the Preregistration Schedule Request Form by students who are preregistering for Summer Sessions courses.

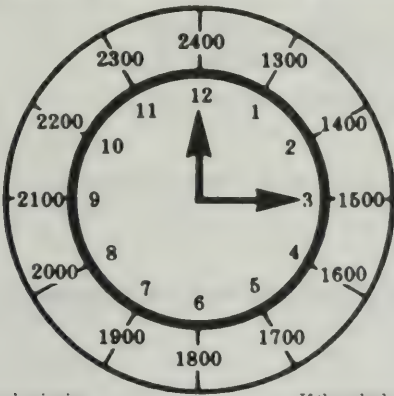
The "\$" symbol beside the departmental abbreviation and course number indicates that the course has been designated as requiring student use of University, School or Departmental laboratory or computing resources. Students enrolling in each course so designated will be charged a \$15.00 laboratory/computer course fee.

Courses numbered from one through 99 are preparatory courses carrying no college credit; courses in the 100, 200, 300 and 400 series are primarily designed for undergraduates; courses in the 500 series for graduates and advanced undergraduates; and courses in the 600 series for graduates only. Consent of the department is required to register for all practicum and individual special topics or special problems courses as well as internships and thesis or dissertation research.

All courses are subject to cancellation by the Director of Summer Sessions if there is inadequate enrollment.

Waiver of prerequisites is at the discretion of the instructor.

Please note that class meeting times in this bulletin are indicated in international time which is measured in hours numbered to 24 instead of 12.



If the schedule shows the class beginning at:	The beginning hour in terms of a 12-hour clock is:	If the schedule shows the class beginning at:	The beginning hour in terms of a 12-hour clock is:
0800	8:00 a.m.	1600	4:00 p.m.
0900	9:00 a.m.	1700	5:00 p.m.
1000	10:00 a.m.	1800	6:00 p.m.
1100	11:00 a.m.	1900	7:00 p.m.
1200	12:00 noon	2000	8:00 p.m.
1300	1:00 p.m.	2100	9:00 p.m.
1400	2:00 p.m.	2200	10:00 p.m.
1500	3:00 p.m.		

SPECIAL GRADUATE CATEGORIES

FIRST SESSION AND SECOND SESSION

GR 596S	MR Summer Research	(046-596-001) 0
GR 597	Master's Exam Only	(046-597-001) 0
GR 598	MR Thesis Preparation	(046-598-001) 0
GR 696S	DR Summer Research	(046-696-001) 0
GR 697	Dissertation Research	(046-697-001) 0
GR 698	DR Thesis Preparation	(046-698-001) 0

Accounting

FIRST SESSION

ACC 210 Accounting I—Concepts of Financial Reporting	3
0800-0930 (004-210-001)	Rockness
0800-0930 (004-210-002)	Staff
1140-1310 (004-210-003)	Staff
0950-1120 (004-210-004)	Peace
ACC 220 Accounting II—An Introduction to Managerial Accounting	3
Prerequisite: ACC 210	
0950-1120 (004-220-001)	Brooks
1140-1310 (004-220-002)	Brooks
ACC 310 Intermediate Financial Accounting I	3
Prerequisite: ACC 220	
0950-1120 (004-310-001)	Rockness
ACC 330 An Introduction to Income Taxation	3
Prerequisites: ACC 210 and EB 201	
0800-0930 (004-330-001)	Peace
ACC 420 Production Cost Analysis and Control	3
Prerequisites: ACC 320 and EB (ST) 350	
0730-0930 (004-420-001)	Zuckerman
May 19-June 17—Four-week course—Final Exam June 17	

SECOND SESSION

ACC 210 Accounting I—Concepts of Financial Reporting	3
0800-0930 (004-210-001)	Staff
1140-1310 (004-210-002)	Staff
0950-1120 (004-210-003)	Williams
ACC 220 Accounting II—An Introduction to Managerial Accounting	3
Prerequisite: ACC 210	
0950-1120 (004-220-001)	Zuckerman
0800-0930 (004-220-002)	Staff
ACC 311 Intermediate Financial Accounting II	3
Prerequisite: ACC 310	
1140-1310 (004-311-001)	Frazier
1340-1510 (004-311-002)	Frazier
ACC 320 Managerial Uses of Cost Data	3
Prerequisite: ACC 220	
0800-0930 (004-320-001)	Williams
ACC 410 Advanced Financial Accounting	3
Prerequisite: ACC 311	
0950-1120 (004-410-001)	Skender

ACC 450 Auditing Financial Information	3
Prerequisites: ACC 311, EB (ST) 350	
1140-1310 (004-450-001)	Skender

TEN-WEEK SESSION

ACC 210E Accounting I—Concepts of Financial Reporting	3
1745-1930 TuTh (004-210-051)	Staff

ACC 220E Accounting II—An Introduction to Managerial Accounting	3
Prerequisite: ACC 210	
1945-2130 TuTh (004-220-051)	Staff

Animal Science

FIRST SESSION

ANS 590 Topical Problems in Animal Science	Maximum 6
Hours arranged (010-590-001)	Cornwell

ANS 699 Research in Animal Science	Credits Arranged
Hours arranged (010-699-001)	Lassiter

SECOND SESSION

\$ ANS (PO) 204 Feeds and Feeding	4
Prerequisite: Sophomore standing	
LR 0800-0930 (010-204-001)	Pond/Ort
LB 1340-1620 TuTh (010-204-101)	

ANS 590 Topical Problems in Animal Science	Maximum 6
Hours arranged (010-590-001)	Cornwell

ANS 699 Research in Animal Science	Credits Arranged
Hours arranged (010-699-001)	Lassiter

Anthropology

FIRST SESSION

ANT 251 Physical Anthropology	3
0800-0930 (012-251-001)	Rovner

ANT 252 Cultural Anthropology	3
0800-0930 (012-252-001)	Ellovich
0950-1120 (012-252-002)	Ellovich

ANT 252E Cultural Anthropology	3
1745-1930 MTuWTh (012-252-003)	Staff

ANT 253 Prehistoric Archaeology	3
0950-1120 (012-253-001)	Rovner

ANT 498 Special Topics in Anthropology	1-6
Prerequisite: Six hours of SOC/ANT	
Hours arranged (012-498-001)	Walek

SECOND SESSION

ANT 251 Physical Anthropology	3
0800-0930 (012-251-001)	Staff

ANT 252 Cultural Anthropology	3
0800-0930 (012-252-001)	Nickerson
0950-1120 (012-252-002)	Nickerson
1140-1310 (012-252-003)	Wallace

ANT 252E Cultural Anthropology	3
1745-1930 MTuWTh (012-252-004)	Staff
ANT 254 Language and Culture	3
0950-1120 (012-254-001)	Wallace
ANT 498 Special Topics in Anthropology	1-6
Prerequisite: Six hours of SOC/ANT	
Hours arranged (012-498-001)	Walek

Architecture

FIRST SESSION

ARC 595 Independent Study	1-3
Prerequisite: Graduate standing	
Hours arranged (013-595-001)	Burns
ARC 691 Special Topics in Architecture	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (013-691-001)	Burns

SECOND SESSION

ARC 595 Independent Study	1-3
Prerequisite: Graduate standing	
Hours arranged (013-595-001)	Burns
ARC 692 Special Topics in Architecture	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (013-692-001)	Burns

TEN-WEEK SESSION

\$ ARC 400 Intermediate Architectural Design	6
Prerequisite: DF 102. May not be taken more than six times.	
1340-1750 MTuWTh (013-400-051)	Rifki
May 19-July 13—Eight-Week Course—Final Exam July 15	

Biological and Agricultural Engineering

FIRST SESSION

BAE 590 Special Problems	Credits Arranged
Prerequisite: Senior or Graduate standing in Biological and Agricultural Engineering	
Hours arranged (016-590-001)	Staff
BAE 690 Special Topics	1-4
Prerequisite: Graduate standing	
Hours arranged (016-690-001)	Staff
BAE 699 Research in Biological and Agricultural Engineering	Credits Arranged
Prerequisite: Graduate standing in Biological and Agricultural Engineering	
Hours arranged (016-699-001)	Staff

SECOND SESSION

BAE 590 Special Problems	Credits Arranged
Prerequisite: Senior or Graduate standing in Biological and Agricultural Engineering	
Hours arranged (016-590-001)	Staff
BAE 690 Special Topics	1-4
Prerequisite: Graduate standing	
Hours arranged (016-690-001)	Staff

BAE 699 Research in Biological and Agricultural Engineering Credits Arranged
 Prerequisite: Graduate standing in Biological and Agricultural Engineering
 Hours arranged (016-699-001) Staff

Biochemistry

FIRST SESSION

BCH 490 Special Studies in Biochemistry 1-3
 Prerequisite: Senior standing
 Hours arranged (015-490-001) Staff

\$ BCH 554 Radioisotope Techniques in Biology 2
 Prerequisite: BCH 451 or Consent of Instructor
 0800-1200 (015-554-001) Sisler
 May 19-June 9—Three-week course—Final Exam June 9

BCH 590 Special Topics in Biochemistry Credits Arranged
 Prerequisite: BCH 451 or equivalent
 Hours arranged (015-590-001) Staff

BCH 695 Special Topics in Biochemistry Credits Arranged
 Prerequisite: Graduate standing in BCH
 Hours arranged (015-695-001) Staff

BCH 699 Biochemical Research Credits Arranged
 Hours arranged (015-699-001) Staff

SECOND SESSION

BCH 451 Introductory Biochemistry 3
 Prerequisite: CH 223
 0950-1120 (015-451-001) Staff

BCH 490 Special Studies in Biochemistry 1-3
 Prerequisite: Senior standing
 Hours arranged (015-490-001) Staff

BCH 590 Special Topics in Biochemistry Credits Arranged
 Prerequisite: BCH 451 or equivalent
 Hours arranged (015-590-001) Staff

BCH 695 Special Topics in Biochemistry Credits Arranged
 Prerequisite: Graduate standing in BCH
 Hours arranged (015-695-001) Staff

BCH 699 Biochemical Research Credits Arranged
 Hours arranged (015-699-001) Staff

Biomathematics

FIRST SESSION

BMA 591 Special Topics Maximum 3
 Prerequisite: Consent of Instructor
 Hours arranged (018-591-001) Staff

BMA 691 Advanced Special Topics 1-3
 Prerequisite: Consent of Instructor
 Hours arranged (018-691-001) Staff

BMA 699 Research Credits Arranged
 Hours arranged (018-699-001) Staff

SECOND SESSION

BMA 591 Special Topics

Prerequisite: Consent of Instructor

Hours arranged (018-591-001)

Maximum 3

Staff

BMA 691 Advanced Special Topics

Prerequisite: Consent of Instructor

Hours arranged (018-691-001)

1-3

Staff

BMA 699 Research

Hours arranged (018-699-001)

Credits Arranged

Staff

Botany

FIRST SESSION

BO (ZO) 360 Introduction to Ecology

Prerequisite: A 200-level biology course

0950-1120 (019-360-001)

3

Staff

\$ BO (ZO) 365 Ecology Laboratory

Corequisite: BO (ZO) 360

1210-1500 MTh (019-365-101)

1525-1815 MTh (019-365-102)

1

BO 590 Topical Problems

Prerequisite: Consent of Instructor

Hours arranged (019-590-001)

1-3

Staff

BO 699 Research

Hours arranged (019-699-001)

Credits Arranged

Staff

SECOND SESSION

\$ BO 200 Plant Life

LR 0800-0930 (019-200-001)

LB 1340-1750 MW (019-200-101)

LB 1340-1750 TuTh (019-200-102)

4

Staff

BO 590 Topical Problems

Prerequisite: Consent of Instructor

Hours arranged (019-590-001)

1-3

Staff

BO 699 Research

Hours arranged (019-699-001)

Credits Arranged

Staff

Biological Sciences

FIRST SESSION

\$ BS 100 General Biology

Students may not receive credit for both BS 100 and BS 105

LR 0800-0930 (017-100-001)

LB 1020-1300 TuTh (017-100-101)

LB 1340-1620 TuTh (017-100-102)

LB 1020-1300 WF (017-100-103)

LB 1340-1620 WF (017-100-104)

4

Wynn

BS 495A Special Topics in Biology

Prerequisite: Consent of Instructor and Teaching Coordinator

Hours arranged (017-495-001)

1-6

Staff

SECOND SESSION

BS 495A Special Topics in Biology

1-6

Prerequisite: Consent of Instructor and Teaching Coordinator

Hours arranged (017-495-001)

Staff

\$ BS 510 Advanced Biology for Secondary Teachers

6

Prerequisite: Two years of college biology

LR 0800-0930 (017-510-001)

Lytle/Coffey

LB 1020-1230 and 1340-1550 MTuWTh (017-510-101)

June 22-July 24—Five-Week Course—Final Exam July 24

Civil Engineering

FIRST SESSION

CE 213 Introduction to Mechanics

3

Corequisite: MA 202

Not for CE department majors.

0730-0900 (022-213-001)

Staff

CE 214 Engineering Mechanics—Statics

3

Prerequisite: PY 205

Corequisite: MA 202

0910-1040 (022-214-001)

Staff

CE 215 Engineering Mechanics—Dynamics

3

Prerequisite: A grade of C or better in CE 214

Corequisite: MA 301

1050-1220 (022-215-001)

Staff

CE 313 Mechanics of Solids

3

Prerequisite: A grade of C or better in CE 214

Corequisite: MA 301

0730-0900 (022-313-001)

Staff

CE 464 Legal Aspects of Contracting

3

Prerequisite: Senior standing

0730-0900 (022-464-001)

Staff

CE 498A Special Problems in Civil Engineering

1-4

Prerequisite: Senior standing

Hours arranged (022-498-001)

Wahls

CE 598 Civil Engineering Projects

1-6

Hours arranged (022-598-001)

Wahls

CE 698 Advanced Reading in Civil Engineering

1-3

Prerequisite: Graduate standing

Hours arranged (022-698-001)

Wahls

CE 699 Civil Engineering Research

Credits Arranged

Hours arranged (022-699-001)

Wahls

SECOND SESSION

CE 213 Introduction to Mechanics

3

Corequisite: MA 202

0730-0900 (022-213-001)

Staff

CE 214 Engineering Mechanics—Statics

3

Prerequisite: PY 205

Corequisite: MA 202

0910-1040 (022-214-001)

Staff

CE 215 Engineering Mechanics—Dynamics	3
Prerequisite: A grade of C or better in CE 214	
Corequisite: MA 301	
1050-1220 (022-215-001)	Staff
CE 313 Mechanics of Solids	3
Prerequisite: A grade of C or better in CE 214	
Corequisite: MA 301	
0730-0900 (022-313-001)	Staff
CE 498A Special Problems in Civil Engineering	1-4
Prerequisite: Senior standing	
Hours arranged (022-498-001)	Wahls
CE 598 Civil Engineering Projects	1-6
Hours arranged (022-598-001)	Wahls
CE 698 Advanced Reading in Civil Engineering	1-3
Prerequisite: Graduate standing	
Hours arranged (022-698-001)	Wahls
CE 699 Civil Engineering Research	Credits Arranged
Hours arranged (022-699-001)	Wahls
TEN-WEEK SESSION	
CE 325 Structural Analysis	3
Prerequisites: CE 202 and CE 313	
0910-1040 MWF (022-325-051)	Staff
CE 327 Reinforced Concrete Design	3
Prerequisite: CE 325 and CE 332	
1050-1220 (022-327-051)	Staff
\$ CE 382 Hydraulics	4
Prerequisites: CE 202, CE 215, MA 301	
LR 0730-0900 MWF (022-382-051)	Staff
LB 0730-0900 TuTh (022-382-151)	
CE 426 Structural Steel Design	3
Prerequisite: CE 325	
1300-1430 MWF (022-426-051)	Staff

Chemistry

FIRST SESSION

\$ CH 101 General Chemistry I	4
Prerequisite: MA 111 with a grade of C or better	
LR 0800-0930 (021-101-001)	Staff
LB 0940-1340 MW (021-101-101) (021-101-102) (021-101-103)	
LB 1340-1750 MW (021-101-110) (021-101-111) (021-101-112)	
\$ CH 104 Experimental Chemistry	1
Prerequisite: CH 101	
Corequisite: CH 105	
LB 1340-1750 MW (021-104-001)	Staff
CH 105 Chemistry Principles and Applications	3
Prerequisite: CH 101 with a grade of C or better. Credit cannot be received for both CH 105 and either CH 103 or CH 107.	
0950-1120 (021-105-001)	Staff

\$ CH 107 Principles of Chemistry	4
Prerequisite: CH 101 with a grade of C or better.	
LR 0950-1120 (021-107-001)	Staff
LB 1340-1750 MW (021-107-109) (021-107-113) (021-107-114) (021-107-115)	
\$ CH 221 Organic Chemistry I	4
Prerequisite: CH 107. Credit is not allowed for both CH 220 and CH 221.	
LR 0800-0930 (021-221-001)	Staff
LB 0940-1340 MW (021-221-101) (021-221-102) (021-221-103)	
LB 1340-1750 MW (021-221-105) (021-221-106)	
\$ CH 223 Organic Chemistry II	4
Prerequisite: CH 221	
LR 0800-0930 (021-223-001)	Staff
LB 0940-1340 TuTh (021-223-109) (021-223-111)	
LB 1340-1750 TuTh (021-223-112) (021-223-113)	
\$ CH 315 Qualitative Analysis	4
Prerequisite: CH 103 or CH 107, or CH 104 and CH 105. Credit is not allowed for both CH 315 and CH 317.	
LR 0800-0930 (021-315-001)	Staff
LB 0940-1340 MW (021-315-101)	
LB 1340-1750 MW (021-315-102)	
LB 0940-1340 TuTh (021-315-103)	
CH 401 Systematic Inorganic Chemistry	3
Corequisite: CH 431 or CH 331	
0950-1120 (021-401-001)	Staff
CH 431 Physical Chemistry I	3
Prerequisites: CH 107, MA 202, PY 203 or PY 208	
Corequisite: MA 301	
1140-1310 (021-431-001)	Staff
\$ CH 499 Senior Research in Chemistry	1-3
Prerequisite: Three years in Chemistry	
Hours arranged (021-499-001)	Staff
CH 699 Chemical Research	Credits Arranged
Prerequisite: Graduate standing in Chemistry	
Hours arranged (021-699-001)	Staff
SECOND SESSION	
\$ CH 101 General Chemistry I	4
Prerequisite: MA 111 with a grade of C or better	
LR 0800-0930 (021-101-001)	Staff
LB 0940-1340 MW (021-101-101) (021-101-102)	
LB 1340-1750 MW (021-101-110) (021-101-111)	
\$ CH 103 General Chemistry II	4
Prerequisite: CH 101	
LR 0800-0930 (021-103-001)	Staff
LB 0940-1340 MW (021-103-104) (021-103-105)	
LB 1340-1750 MW (021-103-112)	
\$ CH 104 Experimental Chemistry	1
Prerequisite: CH 101	
Corequisite: CH 105	
LB 1340-1750 MW (021-104-001)	Staff

CH 105 Chemistry Principles and Applications	3
Prerequisite: CH 101 with a grade of C or better. Credit cannot be received for both CH 105 and either CH 103 or CH 107.	
0950-1120 (021-105-001)	Staff
\$ CH 107 Principles of Chemistry	4
Prerequisite: CH 101 with a grade of C or better.	
LR 0950-1120 (021-107-001)	Staff
LB 1340-1750 MW (021-107-109) (021-107-113) (021-107-114) (021-107-115)	
\$ CH 221 Organic Chemistry I	4
Prerequisite: CH 107. Credit is not allowed for both CH 220 and CH 221.	
LR 0800-0930 (021-221-001)	Staff
LB 0940-1340 MW (021-221-101) (021-221-102)	
\$ CH 223 Organic Chemistry II	4
Prerequisite: CH 221	
LR 0800-0930 (021-223-001)	Staff
LB 0940-1340 MW (021-223-109)	
LB 0940-1340 TuTh (021-223-110) (021-223-111) (021-223-112)	
CH 433 Physical Chemistry II	3
Prerequisites: CH 431 and MA 301	
1140-1310 (021-433-001)	Staff
\$ CH 499 Senior Research in Chemistry	1-3
Prerequisite: Three years in Chemistry	
Hours arranged (021-499-001)	Staff
CH 595T Special Topics in Chemistry: High School Teachers I	3
Prerequisite: Consent of Instructor.	
0950-1120 (021-595-001)	Staff
CH 699 Chemical Research	Credits Arranged
Prerequisite: Graduate standing in Chemistry	
Hours arranged (021-699-001)	Staff

Chemical Engineering

FIRST SESSION

\$ CHE 205 Chemical Process Principles	4
Prerequisites: MA 201, PY 205, CH 107	
Corequisite: MA 202	
1020-1230 (020-205-001)	Chern
CHE 497 Chemical Engineering Projects I	3
Prerequisites: Senior standing, CHE 330	
Hours arranged (020-497-001)	Setzer
CHE 498 Chemical Engineering Projects II	1-3
Prerequisites: Senior standing, CHE 330	
Hours arranged (020-498-001)	Setzer
CHE 699 Research	Credits Arranged
Hours arranged (020-699-001)	Hopfenberg

SECOND SESSION

\$ CHE 225 Chemical Process Systems

3

Prerequisites: PY 208, C or better in CHE 205

Corequisite: MA 301

LR 1020-1230 TuTh (020-225-001)

Marsland

LB 0950-1120 MWF (020-225-101)

LB 1140-1310 MWF (020-225-102)

CHE 497 Chemical Engineering Projects I

3

Prerequisites: Senior standing, CHE 330

Hours arranged (020-497-001)

Setzer

CHE 498 Chemical Engineering Projects II

1-3

Prerequisites: Senior standing, CHE 330

Hours arranged (020-498-001)

Setzer

CHE 699 Research

Credits Arranged

Hours arranged (020-699-001)

Hopfenberg

CO-OP PROGRAM

TWELVE-WEEK SESSION

(Deadlines for Ten-Week Session apply)

Engineering Undergraduate Students Only

COP 100E Co-op Work Program

0

Hours arranged (025-100-051)

Weston

COP 200E Co-op Work Program

0

Hours arranged (025-200-051)

Weston

COP 300E Co-op Work Program

0

Hours arranged (025-300-051)

Weston

COP 400E Co-op Work Program

0

Hours arranged (025-400-051)

Weston

COP 500E Co-op Work Program

0

Hours arranged (025-500-051)

Weston

Forest Resources Undergraduate Students Only

COP 100F Co-op Work Program

0

Hours arranged (025-100-052)

Weston

COP 200F Co-op Work Program

0

Hours arranged (025-200-052)

Weston

COP 300F Co-op Work Program

0

Hours arranged (025-300-052)

Weston

COP 400F Co-op Work Program

0

Hours arranged (025-400-052)

Weston

COP 500F Co-op Work Program

0

Hours arranged (025-500-052)

Weston

Humanities and Social Sciences Undergraduate Students Only

COP 100L Co-op Work Program

0

Hours arranged (025-100-053)

Weston

COP 200L Co-op Work Program	0
Hours arranged (025-200-053)	Weston
COP 300L Co-op Work Program	0
Hours arranged (025-300-053)	Weston
COP 400L Co-op Work Program	0
Hours arranged (025-400-053)	Weston
COP 500L Co-op Work Program	0
Hours arranged (025-500-053)	Weston
Physical and Mathematical Sciences Undergraduate Students Only	
COP 100P Co-op Work Program	0
Hours arranged (025-100-054)	Weston
COP 200P Co-op Work Program	0
Hours arranged (025-200-054)	Weston
COP 300P Co-op Work Program	0
Hours arranged (025-300-054)	Weston
COP 400P Co-op Work Program	0
Hours arranged (025-400-054)	Weston
COP 500P Co-op Work Program	0
Hours arranged (025-500-054)	Weston
Textiles Undergraduate Students Only	
COP 100T Co-op Work Program	0
Hours arranged (025-100-055)	Weston
COP 200T Co-op Work Program	0
Hours arranged (025-200-055)	Weston
COP 300T Co-op Work Program	0
Hours arranged (025-300-055)	Weston
COP 400T Co-op Work Program	0
Hours arranged (025-400-055)	Weston
COP 500T Co-op Work Program	0
Hours arranged (025-500-055)	Weston
Agriculture and Life Sciences Undergraduate Students Only	
COP 100A Co-op Work Program	0
Hours arranged (025-100-056)	Weston
COP 200A Co-op Work Program	0
Hours arranged (025-200-056)	Weston
COP 300A Co-op Work Program	0
Hours arranged (025-300-056)	Weston
COP 400A Co-op Work Program	0
Hours arranged (025-400-056)	Weston
COP 500A Co-op Work Program	0
Hours arranged (025-500-056)	Weston

Design Undergraduate Students Only

COP 100D Co-op Work Program	0
Hours arranged (025-100-057)	Weston
COP 200D Co-op Work Program	0
Hours arranged (025-200-057)	Weston
COP 300D Co-op Work Program	0
Hours arranged (025-300-057)	Weston
COP 400D Co-op Work Program	0
Hours arranged (025-400-057)	Weston
COP 500D Co-op Work Program	0
Hours arranged (025-500-057)	Weston

Education Undergraduate Students Only

COP 100W Co-op Work Program	0
Hours arranged (025-100-058)	Weston
COP 200W Co-op Work Program	0
Hours arranged (025-200-058)	Weston
COP 300W Co-op Work Program	0
Hours arranged (025-300-058)	Weston
COP 400W Co-op Work Program	0
Hours arranged (025-400-058)	Weston
COP 500W Co-op Work Program	0
Hours arranged (025-500-058)	Weston

Graduate Students Only

COP 500N Co-op Work Program	0
Hours arranged. Full-time Alternating. (025-500-059)	Weston
COP 500R Co-op Work Program	0
Hours arranged. Part-time Parallel. (025-500-060)	Weston

Crop Science

FIRST SESSION

CS 591 Special Problems	Credits Arranged
Prerequisite: Consent of Instructor	
Hours arranged (024-591-001)	Emery
CS 699 Research	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (024-699-001)	Emery

SECOND SESSION

CS 591 Special Problems	Credits Arranged
Prerequisite: Consent of Instructor	
Hours arranged (024-591-001)	Emery
CS 699 Research	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (024-699-001)	Emery

Computer Science

TEN-WEEK SESSION

\$ CSC 101E Introduction to Programming	3
Prerequisite: MA 111	
LR 1745-1915 MW (023-101-051)	Balla
LB 1945-2130 MW (023-101-151) (023-101-152) (023-101-153) (023-101-154) (023-101-155) (023-101-156)	
\$ CSC 102 Programming Concepts	3
Prerequisite: CSC 101	
1340-1525 MW (023-102-051)	Brain
\$ CSC 102E Programming Concepts	3
Prerequisite: CSC 101	
1745-1930 MW (023-102-052)	Brain
\$ CSC 111 Introduction to FORTRAN Programming	2
0800-0930 MW (023-111-051)	Reid
CSC 200A Introduction to Computers and Their Uses	3
A student who has previously taken CSC 101 or CSC 111 may not receive credit for this course.	
1140-1255 TuTh (023-200-051)	Lindhome/Curtis
NOTE: Students registering for CSC 200A must also register for CSC 200X	
\$ CSC 200X Introduction to Computers Laboratory	0
1305-1605 Tu (023-200-151)	
0900-1200 W (023-200-152)	
1305-1605 W (023-200-153)	
CSC 200E Introduction to Computers and Their Uses	3
A student who has previously taken CSC 101 or CSC 111 may not receive credit for this course.	
1615-1730 TuTh (023-200-052)	Lindhome/Curtis
NOTE: Students registering for CSC 200E must also register for CSC 200Y	
\$ CSC 200Y Introduction to Computers Laboratory	0
1745-2045 Tu (023-200-161)	
1745-2045 W (023-200-162)	
1745-2045 Th (023-200-163)	
\$ CSC 201 Basic Computer Organization and Assembly Language	3
Prerequisite: CSC 101 or CSC 111	
1340-1525 TuTh (023-201-051)	E. Hodges
\$ CSC 201E Basic Computer Organization and Assembly Language	3
Prerequisite: CSC 101 or CSC 111	
1745-1930 TuTh (023-201-052)	E. Hodges
\$ CSC 202E Concepts and Facilities of Operating Systems	3
Prerequisite: CSC 201 or equivalent	
1945-2130 TuTh (023-202-051)	L. Hodges
\$ CSC 252E Principles of Programming—COBOL	2
Prerequisite: CSC 101	
1945-2115 MW (023-252-051)	Secrest/Turyn
\$ CSC 302 Introduction to Numerical Methods	3
Prerequisite: CSC 101 or CSC 111	
Corequisite: MA 202	
1200-1345 MW (023-302-051)	Reid

\$ CSC 311 Data Structures	3
Prerequisites: CSC 102 and CSC 201	
1140-1325 TuTh (023-311-051)	Robbins
\$ CSC 311E Data Structures	3
Prerequisites: CSC 102 and CSC 201	
1745-1930 TuTh (023-311-052)	Staff
\$ CSC 312 Computer Organization and Logic	4
Prerequisite: CSC 201	
Corequisite: CSC 322	
LR 0950-1120 MW (023-312-051)	
LB 1340-1550 MW (023-312-151)	Davis
LB 1340-1550 MW (023-312-152)	
CSC (MA) 322 Discrete Mathematical Structures	3
Prerequisite: MA 202	
Corequisite: CSC 311	
0910-1055 MW (023-322-051)	Williamson
\$ CSC 417 Theory of Programming Languages	3
Prerequisite: CSC (MA) 322	
1340-1525 MW (023-417-051)	Williamson
CSC 421E Introduction to Management Information Systems	3
Prerequisite: CSC 311	
1745-1930 MW (023-421-051)	Schur
\$ CSC 431E File Organization and Processing	3
Prerequisite: CSC 311	
1545-1730 TuTh (023-431-051)	Ruchte
\$ CSC 461 Computer Graphics	3
Prerequisites: MA 202 or MA 212; CSC 101 or CSC 111	
1340-1525 TuTh (023-461-051)	Robbins
\$ CSC 461E Computer Graphics	3
Prerequisites: MA 202 or MA 212; CSC 101 or CSC 111	
1745-1930 TuTh (023-461-052)	L. Hodges
CSC 495 Special Topics in Computer Science	1-6
Prerequisite: Consent of Instructor	
Hours arranged (023-495-051)	Honeycutt
\$ CSC 499 Independent Research in Computer Science	1-6
Prerequisite: Consent of Department	
Hours arranged (023-499-051)	Honeycutt

Computer Studies

TEN-WEEK SESSION

\$ CSE 452 Assembly Language and Basic Computer Organization	1
Prerequisites: Higher level programming language and Consent of Instructor	
No degree credit for Computer Science or Computer Studies majors or anyone having received credit for CSC 201 or CSC 256.	
1340-1525 TuTh (009-452-051)	E. Hodges
\$ CSE 452E Assembly Language and Basic Computer Organization	1
Prerequisites: Higher level programming language and Consent of Instructor	
No degree credit for Computer Science or Computer Studies majors or anyone having received credit for CSC 201 or CSC 256.	
1745-1930 TuTh (009-452-052)	E. Hodges

\$ CSE 453 Data Structures	1
Prerequisites: Higher level programming language and Consent of Instructor	
Corequisite: CSE 452 or equivalent	
No degree credit for Computer Science or Computer Studies majors or anyone having received credit for CSC 311.	
1140-1325 TuTh (009-453-051)	Robbins
\$ CSE 453E Data Structures	1
Prerequisites: Higher level programming language and Consent of Instructor	
Corequisite: CSE 452 or equivalent	
No degree credit for Computer Science or Computer Studies majors or anyone having received credit for CSC 311.	
1745-1930 TuTh (009-453-052)	Staff
CSE 693 Individual Topics in Computer Studies	1-3
Prerequisites: Graduate standing and Consent of Instructor	
Hours arranged (009-693-051)	Chou
\$ CSE 699 Computer Studies Research	Credits Arranged
Prerequisites: Graduate standing and Consent of Instructor	
Hours arranged (009-699-051)	Chou

Design

FIRST SESSION

DN 411F Advanced Visual Laboratory—Drawing	3
Prerequisites: DF 102, Sophomore standing	
Maximum 12 credit hours	
1340-1750 (026-411-001)	Staff
DN 494A Internship in Design	3-6
Prerequisites: Junior standing and approval of Department Head	
Maximum 6 credit hours	
Hours arranged (026-494-001)	Burns
DN 494B Internship in Design	3-6
Prerequisites: Junior standing and approval of Department Head	
Maximum 6 credit hours	
Hours arranged (026-494-002)	Sullivan
DN 494C Internship in Design	3-6
Prerequisites: Junior standing and approval of Department Head	
Maximum 6 credit hours	
Hours arranged (026-494-003)	Staff
DN 494D Internship in Design	3-6
Prerequisites: Junior standing and approval of Department Head	
Maximum 6 credit hours	
Hours arranged (026-494-004)	Joyner
DN 495A Independent Study in Design	1-3
Prerequisites: Junior standing and approval of Department Head and core chairman	
Maximum 6 credit hours	
Hours arranged (026-495-001)	Burns
DN 495B Independent Study in Design	1-3
Prerequisites: Junior standing and approval of Department Head and core chairman	
Maximum 6 credit hours	
Hours arranged (026-495-002)	Sullivan

DN 495C Independent Study in Design	1-3
Prerequisites: Junior standing and approval of Department Head and core chairman	
Maximum 6 credit hours	
Hours arranged (026-495-003)	Staff
DN 495D Independent Study in Design	1-3
Prerequisites: Junior standing and approval of Department Head and core chairman	
Maximum 6 credit hours	
Hours arranged (026-495-004)	Joyner
SECOND SESSION	
\$ DN 251 Principles of Architectural Structures	3
LR 0950-1120 (026-251-001)	Sanders
LB 1340-1650 TuTh (026-251-101)	
\$ DN 254 Architectural Materials	3
LR 0800-0930 (026-254-001)	Rand
LB 1340-1650 W (026-254-101)	
DN 494A Internship in Design	3-6
Prerequisites: Junior standing and approval of Department Head	
Maximum 6 credit hours	
Hours arranged (026-494-001)	Burns
DN 494B Internship in Design	3-6
Prerequisites: Junior standing and approval of Department Head	
Maximum 6 credit hours	
Hours arranged (026-494-002)	Sullivan
DN 494C Internship in Design	3-6
Prerequisites: Junior standing and approval of Department Head	
Maximum 6 credit hours	
Hours arranged (026-494-003)	Staff
DN 494D Internship in Design	3-6
Prerequisites: Junior standing and approval of Department Head	
Maximum 6 credit hours	
Hours arranged (026-494-004)	Joyner
DN 495A Independent Study in Design	1-3
Prerequisites: Junior standing and approval of Department Head and core chairman	
Maximum 6 credit hours	
Hours arranged (026-495-001)	Burns
DN 495B Independent Study in Design	1-3
Prerequisites: Junior standing and approval of Department Head and core chairman	
Maximum 6 credit hours	
Hours arranged (026-495-002)	Sullivan
DN 495C Independent Study in Design	1-3
Prerequisites: Junior standing and approval of Department Head and core chairman	
Maximum 6 credit hours	
Hours arranged (026-495-003)	Staff
DN 495D Independent Study in Design	1-3
Prerequisites: Junior standing and approval of Department Head and core chairman	
Maximum 6 credit hours	
Hours arranged (026-495-004)	Joyner

Economics and Business

FIRST SESSION

EB 201 Economics I

3

Credit will not be awarded for both EB 201 and EB 212. Students interested in Agriculture and Natural Resources should enroll in EB 212 instead of this course.

0800-0930 (027-201-001) (027-201-002)

Staff

0950-1120 (027-201-003)

Staff

0950-1120 (027-201-004)

Liebowitz

1340-1410 (027-201-005)

Liebowitz

1140-1310 (027-201-006)

Staff

0950-1120 (027-201-007)

Staff

EB 202 Economics II

3

Prerequisite: EB 201 or EB 212

0800-0930 (027-202-001)

Staff

0950-1120 (027-202-002)

Staff

EB 301 Intermediate Microeconomics

3

Prerequisites: MA 113 or MA 112 and EB 201 or EB 212

0800-0930 (027-301-001)

Margolis

0950-1120 (027-301-002)

Margolis

0950-1120 (027-301-003)

Baumer

EB 302 Intermediate Macroeconomics

3

Prerequisites: EB 201 or EB 212; MA 113 or MA 112

0800-0930 (027-302-001)

Rossana

0950-1120 (027-302-002)

Rossana

EB 307 Business Law I

3

Prerequisite: EB 201 or EB 212

Credit for both EB 306 and EB 307 is not allowed.

0950-1120 (027-307-001)

Allen

1140-1310 (027-307-002)

Allen

EB 313 Marketing Methods

3

Prerequisite: EB 201 or EB 212

0800-0930 (027-313-001)

Gerstner

0950-1120 (027-313-002)

Gerstner

EB 326 Human Resource Management

3

Prerequisite: EB 201 or EB 212

0800-0930 (027-326-001)

Wessels

0950-1120 (027-326-002)

Wessels

0950-1120 (027-326-003)

Staff

EB (ST) 350 Economics and Business Statistics

3

Prerequisites: MA 114; EB 201 or EB 212

0800-0930 (027-350-001)

Wilson

0950-1120 (027-350-002)

Wilson

EB (HI) 371 Evolution of the American Economy

3

Prerequisite: EB 201 or EB 212

1340-1510 (027-371-001)

Ball

EB 413 Competition, Monopoly and Public Policy

3

Prerequisite: EB 301

1140-1310 (027-413-001)

Baumer

EB 420 Corporation Finance	3
Prerequisites: EB 201 or EB 212 and ACC 210 or ACC 280	
0950-1120 (027-420-001)	Kupiec
1140-1310 (027-420-002)	Kupiec
EB 422 Investments and Portfolio Management	3
Prerequisites: EB (ST) 350 or ST 311, and EB 420	
0800-0930 (027-422-001)	M. Fisher
0950-1120 (027-422-002)	M. Fisher
EB 448 International Economics	3
Prerequisite: EB 301	
0950-1120 (027-448-001)	Ball
EB 598 Topical Problems in Economics	1-6
Prerequisite: Consent of Instructor	
Hours arranged (027-598-001)	Staff
EB 699 Research in Economics	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (027-699-001)	Staff
SECOND SESSION	
EB 201 Economics I	3
Credit will not be awarded for both EB 201 and EB 212. Students interested in Agriculture and Natural Resources should enroll in EB 212 instead of this course.	
0800-0930 (027-201-001)	Staff
0950-1120 (027-201-002)	Staff
1140-1310 (027-201-003)	Peeler
0950-1120 (027-201-004)	Staff
0800-0930 (027-201-005)	Staff
EB 202 Economics II	3
Prerequisite: EB 201 or EB 212	
0800-0930 (027-202-001)	Staff
0950-1120 (027-202-002)	Staff
EB 212 Economics of Agriculture	3
Prerequisite: MA 111. Credit will not be awarded for both EB 201 and EB 212.	
0950-1120 (027-212-001)	Peeler
EB 301 Intermediate Microeconomics	3
Prerequisites: MA 113 or MA 112 and EB 201 or EB 212	
0950-1120 (027-301-001)	Hess
0800-0930 (027-301-002)	Hess
EB 302 Intermediate Macroeconomics	3
Prerequisites: MA 113 or MA 112; EB 201 or EB 212	
0950-1120 (027-302-001)	Staff
1140-1310 (027-302-002)	Staff
EB 308 Business Law II	3
Prerequisite: EB 307	
0800-0930 (027-308-001)	Huggard
EB 313 Marketing Methods	3
Prerequisite: EB 201 or EB 212	
0800-0930 (027-313-001)	Staff
0950-1120 (027-313-002)	Staff

EB 325 Managerial Economics	3
Prerequisite: EB 201 or EB 212	
0950-1120 (027-325-001)	Newmark
0800-0930 (027-325-002)	Staff
0950-1120 (027-325-003)	Staff
EB 422 Investments and Portfolio Management	3
Prerequisites: EB (ST) 350 or ST 311, and EB 420	
0950-1120 (027-422-001)	Jones
1140-1310 (027-422-002)	Jones
EB 598 Topical Problems in Economics	1-6
Prerequisite: Consent of Instructor	
Hours arranged (027-598-001)	Staff
EB 699 Research in Economics	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (027-699-001)	Staff
TEN-WEEK SESSION	
EB 307E Business Law I	3
Prerequisite: EB 201 or EB 212	
Credit for both EB 306 and EB 307 is not allowed.	
1745-1930 MW (027-307-051)	Staff
EB 501E Price Theory	3
Prerequisites: MA 113 and EB 301	
1745-1930 MW (027-501-051)	Palmquist
EB 502E Income and Employment Theory	3
Prerequisites: MA 113, EB 301 and EB 302, EB (ST) 350	
1745-1930 TuTh (027-502-051)	D. Fisher
EB 625E Long Range Planning in Business and Industry	3
Prerequisite: EB 501	
1745-1930 MW (027-625-051)	Newmark

Electrical and Computer Engineering

FIRST SESSION

ECE 331 Principles of Electrical Engineering I	3
Prerequisites: MA 201, PY 208	
Not available to EE and CPE majors	
0800-0930 (030-331-001)	Moore
ECE 435 Elements of Control	3
Prerequisites: ECE 301, ECE 302, ECE 314	
0950-1120 (030-435-001)	Elbuluk
ECE 699 Electrical Engineering Research	Credits Arranged
Prerequisites: Graduate standing in Electrical and Computer Engineering and approval of advisor	
Hours arranged (030-699-001)	Staff

SECOND SESSION

ECE 332 Principles of Electrical Engineering II	3
Prerequisite: ECE 331	
Not available to EE and CPE majors	
0800-0930 (030-332-001)	Moore

ECE 699 Electrical Engineering Research	Credits Arranged
Prerequisites: Graduate standing in Electrical and Computer Engineering and approval of advisor	
Hours arranged (030-699-001)	Staff
TEN-WEEK SESSION	
ECE 211 Electric Circuits I	3
Prerequisites: Sophomore standing and GPA 2.4 or above with a grade of C or better in ENG 111, MA 102S, MA 201S, and PY 205.	
Corequisites: PY 208, MA 202S (Note: students may satisfy the MA corequisite by scheduling MA 202S in the Second Summer Session)	
1140-1255 MWF (030-211-051)	Staff
ECE 212 Fundamentals of Logic Design	3
Prerequisites: Sophomore standing and GPA 2.4 or above with a grade of C or better in ENG 111, MA 102S, MA 201S, and PY 205.	
0950-1105 MWF (030-212-051)	Staff
\$ ECE 213 Electronic Circuits I Laboratory	1
Prerequisite: ECE 211 (correspondence students)	
Corequisite: ECE 211	
1345-1635 M (030-213-051)	Staff
1135-1425 Tu (030-213-052)	Staff
1445-1735 Tu (030-213-053)	Staff
1345-1635 W (030-213-054)	Staff
1135-1425 Th (030-213-055)	Staff
1445-1735 Th (030-213-056)	Staff
\$ ECE 214 Fundamentals of Logic Design Laboratory	1
Corequisite: ECE 212	
1135-1425 M (030-214-051)	Staff
1445-1735 M (030-214-052)	Staff
1135-1425 Tu (030-214-053)	Staff
1445-1735 Tu (030-214-054)	Staff
1135-1425 W (030-214-055)	Staff
1445-1735 W (030-214-056)	Staff
\$ ECE 301 Linear Systems	3
Prerequisite: A grade of C or better in ECE 211	
0950-1105 MWF (030-301-051)	Stonick
\$ ECE 302 Electrical Circuits II with Numerical Applications	3
Prerequisites: CSC 101 and a grade of C or better in ECE 211	
0800-0915 MWF (030-302-051)	White

Education

FIRST SESSION

ED 203 Introduction to Teaching Mathematics and Science	3
0800-1120 (028-203-001)	Anderson
ED 296 Special Topics in Education	1-3
Hours arranged (028-296-001)	Williams
ED 296A Special Topics in Education: Health Care Delivery Systems	3
0900-1200 and 1400-1700 (028-296-002)	Patterson
June 10-June 24—Two-Week Course—Final Exam June 24	
ED 344 School and Society	3
Prerequisite: Junior or Senior standing	
1340-1510 (028-344-001)	Serow

ED 451 Improving Reading In Secondary Schools	2
Prerequisite: Six hours of ED and/or PSY	
1135-1235 (028-451-001)	Kuzminski
ED 475 Methods of Teaching Science	3
Prerequisites: ED 203, ED 344, PSY 304	
Taught concurrently with ED 477 and ED 495A	
1600-1900 TuTh (028-475-001)	Wheatley
May 19-June 11	
and	
0900-1200 MTuWThF	
June 16-June 25	
ED 477 Instructional Materials in Science	2
Prerequisites: ED 203, ED 344, PSY 304	
Corequisites: ED 475, ED 476, Senior standing; admission to teacher education	
Taught concurrently with ED 475 and ED 495A	
1600-1900 TuTh (028-477-001)	Wheatley
May 19-June 11	
and	
0900-1200 MTuWThF	
June 16-June 25	
ED 495A Senior Seminar in Mathematics and Science Education	1
Prerequisites: Advanced undergraduate and Consent of Department	
Taught concurrently with ED 475 and ED 477	
1600-1900 TuTh (028-495-001)	Wheatley
May 19-June 11	
and	
0900-1200 MTuWThF	
June 16-June 25	
ED 496 Special Topics in Education	1-3
Prerequisites: Junior or Senior standing and Consent of Instructor	
Hours arranged (028-496-001)	Williams
ED 508 Education of Severely Handicapped	3
Prerequisite: ED 531 or ED 574 or Consent of Instructor	
1600-1930 TuTh (028-508-001)	Griffin
ED 526 Teaching in College	3
1530-1700 (028-526-001)	Anderson
ED 530E Theories and Techniques of Counseling	3
Prerequisite: Six hours of ED or PSY	
Corequisite: ED 520 or equivalent	
1600-1930 TuTh (028-530-001)	Gerler
ED 533E Group Counseling	3
Prerequisite: ED 530	
1600-1930 MW (028-533-001)	Gerler
ED 536 Structure and Function of the Eye and Use of Low Vision	3
Prerequisite: Consent of Instructor	
0900-1200 (028-536-001)	Griffin
June 8-July 24—Two-Week Course—Final Exam June 24	
(See "Special Courses and Institutes," page 28).	
ED 570 Foundations of Mathematics Education	3
Prerequisite: ED 471 or equivalent	
1800-2100 MW (028-570-001)	W. Waters

ED 586 Methods and Materials in Visual Impairments	3
Prerequisites: ED 506, ED 513	
1300-1600 (028-586-001)	G. Waters
June 8-June 24—Two-Week Course—Final Exam June 24 (See “Special Courses and Institutes,” page 28).	
ED 590 Special Problems in Guidance	Maximum 6
Prerequisites: Six hours graduate work in department or equivalent and Consent of Instructor	
Hours arranged (028-590-001)	Staff
ED 592 Special Problems in Mathematics Teaching	1-3
Prerequisite: ED 471 or equivalent	
Hours arranged (028-592-001)	Staff
ED 594 Special Problems in Science Teaching	1-6
Prerequisite: ED 476 or equivalent	
Hours arranged (028-594-001)	Staff
ED 596 Topical Problems in Adult and Community College Education	Credits Arranged
Prerequisite: Graduate standing or PBS status	
Hours arranged (028-596-001)	Glass
ED 596A Topical Problems in Adult and Community College Education: Death and Dying—A Lifespan Issue	3
Prerequisite: Graduate standing or PBS status	
1600-1930 MW (028-596-002)	Glass
ED 596B Topical Problems in Adult and Community College Education: Working in Groups in Adult Education	3
Prerequisite: Graduate standing or PBS status	
1600-1930 TuTh (028-596-003)	Glass
ED 596C Topical Problems in Adult and Community College Education: Instructional Leadership in the Community College	3
Prerequisite: Graduate standing or PBS status	
Enrollment limited to participants in the Instructional Administrators Leadership Institute or Consent of Instructor.	
0900-1200 and 1300-1600 (028-596-004)	Tollefson
June 15-June 26—Two-Week Course—Final Exam June 26	
ED 597 Special Problems in Education	1-3
Prerequisite: Graduate standing or PBS status	
Hours arranged (028-597-001)	Exum
ED 598 Special Problems in Curriculum and Instruction	1-6
Prerequisites: Six hours of ED or PSY and Consent of Instructor	
Hours arranged (028-598-001)	Staff
ED 598F Special Problems in Curriculum and Instruction: Alternatives for the Middle Years	3
Prerequisites: Six hours of ED or PSY and Consent of Instructor	
0900-1530 (028-598-003)	Arnold
0900-1530 (028-598-004)	Stevenson
June 15-June 26—Two-Week course—Final Exam June 26 (See “Special Courses and Institutes,” page 27).	
ED 599 Research Projects in Education	1-3
Prerequisites: Consent of Instructor, ED 532 or equivalent	
Hours arranged (028-599-001)	Exum

ED 599A Research Projects in Education: Adult and Community College Education	1-3
Prerequisites: Consent of Instructor, ED 532 or equivalent	
Hours arranged (028-599-002)	Glass
ED 621 Internship in Education	3-9
Prerequisites: Nine credit hours in graduate level courses and Consent of Instructor	
Hours arranged (028-621-001)	Exum
ED 625 Cross Cultural Counseling	3
Prerequisites: ED 530; Nine semester hours graduate level Education	
1600-1930 MW (028-625-001)	Locke
ED 636 Observation and Supervised Field Work	1-3
Prerequisite: Consent of Instructor	
Hours arranged (028-636-001)	Sprinthall
ED 696 Seminar in Adult and Community College Education: Leadership Strategies	2
Prerequisite: Graduate standing	
Enrollment limited to participants in the Instructional Administrators Leadership Institute or Consent of Instructor.	
Hours arranged (028-696-001)	Tollefson
June 15-June 26—Two-Week course—Final Exam June 26	
ED 699 Thesis and Dissertation Research	Credits Arranged
Prerequisites: 15 hours of Education, Consent of Instructor	
Hours arranged (028-699-001)	Exum
ED 699A Thesis and Dissertation Research: Adult and Community College Education	Credits Arranged
Prerequisites: 15 hours of Education, Consent of Instructor	
Hours arranged (028-699-002)	Glass
SECOND SESSION	
ED 105 College Developmental Reading	3
(Credit is not applicable toward graduation in any curriculum)	
1300-1430 (028-105-001)	Abernathy
ED 296 Special Topics in Education	1-3
Hours arranged (028-296-001)	Williams
ED 296A Special Topics in Education: Desk Top Publishing	3
0730-0845 (028-296-002)	Peterson
ED 496 Special Topics in Education	1-3
Prerequisites: Junior or Senior standing and Consent of Instructor	
Hours arranged (028-496-001)	Williams
ED 532 Introduction to Educational Inquiry	3
Prerequisite: Graduate standing or PBS status	
1140-1310 (028-532-001)	Marshall
1340-1510 (028-532-002)	Marshall
ED 541B Practicum in Education Administration	1-6
Prerequisites: ED 550 and Consent of Instructor	
Hours arranged (028-541-001)	Taylor
ED 590 Special Problems in Guidance	Maximum 6
Prerequisites: Six hours graduate work in department or equivalent and Consent of Instructor	
Hours arranged (028-590-001)	Staff

ED 592 Special Problems in Mathematics Teaching	1-3
Prerequisite: ED 471 or equivalent	
Hours arranged (028-592-001)	Staff
ED 593 Special Problems in Agricultural Education: Public Relations in Agriculture	3
Prerequisites: Six hours graduate credit in agricultural education and Consent of Instructor	
0900-1200 (028-593-001)	Flowers
June 29-July 20—Three-Week course—Final Exam July 20	
ED 593A Special Problems in Agricultural Education: Teaching Agriculture	3
Prerequisites: Six hours graduate credit in agricultural education and Consent of Instructor	
1330-1630 (028-593-002)	Flowers
June 29-July 20—Three-Week course—Final Exam July 20	
ED 594 Special Problems in Science Teaching	1-6
Prerequisite: ED 476 or equivalent	
Hours arranged (028-594-001)	Staff
ED 596 Topical Problems in Adult and Community College Education	Credits Arranged
Prerequisite: Graduate standing or PBS status	
Hours arranged (028-596-001)	Glass
ED 597 Special Problems in Education	1-3
Prerequisite: Graduate standing or PBS status	
Hours arranged (028-597-001)	Exum
ED 597A Special Problems in Education: Issues and Trends in Vocational Education	3
Prerequisite: Graduate standing or PBS status	
0900-1200 (028-597-002)	Malpiedi
June 29-July 20—Three-Week course—Final Exam July 20	
ED 597B Special Problems in Education: Microcomputer Applications in Vocational Education	3
Prerequisite: Graduate standing or PBS status	
1330-1630 (028-597-003)	Malpiedi
June 29-July 20—Three-Week course—Final Exam July 20	
ED 597C Special Problems in Education: Internal and External Consulting	3
Prerequisite: Graduate standing or PBS status	
1700-2000 TuWTh (028-597-004)	Dillon
ED 597D Special Problems in Education: Medical Law & Ethics	3
Prerequisite: Graduate standing or PBS status	
1700-2100 TuTh (028-597-005)	Patterson
ED 597G Special Problems in Education: Personal Publishing for Classroom Teachers and School Administrators	3
Prerequisite: Graduate standing or PBS status	
0900-1030 (028-597-006)	Ballenger
ED 598 Special Problems in Curriculum and Instruction	1-6
Prerequisites: Six hours of ED or PSY and Consent of Instructor	
Hours arranged (028-598-001)	Staff

ED 598D Special Problems in Curriculum and Instruction: Teaching of Writing Institute	6
Prerequisites: Six hours of ED or PSY and Consent of Instructor 0815-1530 (028-598-005)	Pritchard Buckner
0815-1530 (028-598-006)	
June 22-July 21—Four-Week Course—Final Exam July 21 (See “Special Courses and Institutes,” page 28).	
ED 598J Special Problems in Curriculum and Instruction: Counseling the Gifted Individual	3
Prerequisites: Six hours of ED or PSY and Consent of Instructor 1300-1600 (028-598-007)	Aubrecht
June 22-July 10—Three-Week Course—Final Exam July 10 (See “Special Courses and Institutes,” page 28).	
ED 598V Special Problems in Curriculum and Instruction: Developing Thinking Skills Across the Curriculum	3
Prerequisites: Six hours of ED or PSY and Consent of Instructor 0900-1200 MTuWTh (028-598-008)	Abernathy
July 6-July 31—Four-Week Course—Final Exam July 31 (See “Special Courses and Institutes,” page 28).	
ED 598Y Special Problems in Curriculum and Instruction: Creativity	3
Prerequisites: Six hours of ED or PSY and Consent of Instructor 0900-1200 (028-598-009)	Aubrecht
June 22-July 10—Three-Week Course—Final Exam July 10 (See “Special Courses and Institutes,” page 28).	
ED 599 Research Projects in Education	1-3
Prerequisites: Consent of Instructor, ED 532 or equivalent Hours arranged (028-599-001)	Exum
ED 599A Research Projects in Education: Adult and Community College Education	1-3
Prerequisites: Consent of Instructor, ED 532 or equivalent Hours arranged (028-599-002)	Glass
ED 621 Internship in Education	3-9
Prerequisites: Nine credit hours in graduate level courses and Consent of Instructor Hours arranged (028-621-001)	Exum
ED 636 Observation and Supervised Field Work	1-3
Prerequisite: Consent of Instructor Hours arranged (028-636-001)	Staff
ED 699 Thesis and Dissertation Research	Credits Arranged
Prerequisites: 15 hours of Education, Consent of Instructor Hours arranged (028-699-001)	Dolce
ED 699A Thesis and Dissertation Research: Adult and Community College Education	Credits Arranged
Prerequisites: 15 hours of Education, Consent of Instructor Hours arranged (028-699-002)	Glass

English

FIRST SESSION

FRESHMAN ENGLISH

ENG 111 Composition and Rhetoric

3

General University requirement.

Successful completion of ENG 111 requires a grade of C or better.

0800-0930 (036-111-001) (036-111-002)

Staff

0950-1120 (036-111-003) (036-111-004)

Staff

1140-1310 (036-111-005)

Staff

ENG 112 Composition and Reading

3

General University requirement.

Prerequisite: A grade of C or better in ENG 111.

0800-0930 (036-112-001) (036-112-002) (036-112-003)

Staff

0950-1120 (036-112-004) (036-112-005) (036-112-006)

Staff

1140-1310 (036-112-007) (036-112-008) (036-112-009)

Staff

WRITING AND LANGUAGE

The prerequisite for all courses in writing and language at the 200-level and above is the completion of ENG 111 and ENG 112.

ENG 214 Copyediting

3

0800-0930 (036-214-001)

Cockshutt

ENG 221 Communication for Business and Management

3

0950-1120 (036-221-001)

Covington

ENG 321 The Communication of Technical Information

3

Prerequisite: Junior standing

0800-0930 (036-321-001) (036-321-002) (036-321-003)

Staff

0950-1120 (036-321-004) (036-321-005) (036-321-006)

Staff

1140-1310 (036-321-007) (036-321-008)

Staff

ENG 495 Seminar in Writing-Editing

3

Prerequisite: Major in LWE

1140-1310 (036-495-001)

Cockshutt

LITERATURE

The prerequisite for all literature courses is the completion of ENG 111 and ENG 112.

ENG 205 Studies in Great Works of Literature

3

The courses ENG 205, ENG 206, ENG 207, and ENG 208 are designed for students not enrolled in Humanities and Social Sciences.

0950-1120 (036-205-001)

Staff

ENG 208 Studies in Fiction

3

The courses ENG 205, ENG 206, ENG 207, and ENG 208 are designed for students not enrolled in Humanities and Social Sciences.

0800-0930 (036-208-001)

Staff

0950-1120 (036-208-002)

Staff

1140-1310 (036-208-003)

Staff

0800-0930 (036-208-004)

Staff

ENG 251 Major British Writers

3

Credit will not be given for both ENG 251 and either ENG 261 or ENG 262.

0950-1120 (036-251-001)

Staff

ENG 252 Major American Writers	3
Credit will not be given for both ENG 252 and either ENG 265 or ENG 266.	
1140-1310 (036-252-001)	Staff

ENG 261 English Literature I	3
0800-0930 (036-261-001)	Staff

ENG 262 English Literature II	3
0950-1120 (036-262-001)	Staff

ENG 265 American Literature I	3
0800-0930 (036-265-001)	Staff
0950-1120 (036-265-002)	Staff
1140-1310 (036-265-003)	Staff
0950-1120 (036-265-004)	Staff

ENG 266 American Literature II	3
0800-0930 (036-266-001)	Staff
0950-1120 (036-266-002)	Staff
1140-1310 (036-266-003)	Staff

ENG 298 Special Projects in English	1-3
Hours arranged (036-298-001)	Staff

ENG 369 American Novel of the 19th Century	3
0950-1120 (036-369-001)	Knowles

ENG 453 The Romantic Period	3
Prerequisites: ENG 112 with a grade of C or above; ENG 205 or equivalent	
0800-0930 (036-453-001)	D. Miller

ENG 498 Special Topics in English	1-6
Prerequisite: Six hours in ENG above the freshman level.	
Hours arranged (036-498-001)	Staff

FOR GRADUATES AND ADVANCED UNDERGRADUATES ONLY

The prerequisite for all 500-level English courses is advanced undergraduate or graduate standing unless additional prerequisites are noted.

ENG 579 Restoration and 18th Century Drama	3
1140-1310 (036-579-001)	Durant

FOR GRADUATES ONLY

The prerequisite for all 600-level English courses is graduate standing unless additional prerequisites are noted.

ENG 698 Bibliography and Methodology	3
Prerequisite: Approved thesis topic.	
Hours arranged (036-698-001)	Thesis Director

ENG 699 Research in Literature (Thesis)	Credits Arranged
Prerequisite: Consent of graduate adviser.	
Hours arranged (036-699-001)	Thesis Director

SECOND SESSION

FRESHMAN ENGLISH

ENG 110 Developmental English	3
Credit is not applicable toward graduation in any curriculum. Students placed in ENG 110 must receive a grade of S in order to advance to ENG 111.	
0800-0930 (036-110-001)	Staff

ENG 111 Composition and Rhetoric	3
General University requirement.	
Successful completion of ENG 111 requires a grade of C or better.	
0800-0930 (036-111-001) (036-111-002)	Staff
0950-1120 (036-111-003) (036-111-004)	Staff
1140-1310 (036-111-005)	Staff

ENG 112 Composition and Reading	3
General University requirement.	
Prerequisite: A grade of C or better in ENG 111.	
0800-0930 (036-112-001) (036-112-002) (036-112-003)	Staff
0950-1120 (036-112-004) (036-112-005)	Staff
1140-1310 (036-112-006) (036-112-007)	Staff

WRITING AND LANGUAGE

The prerequisite for all courses in writing and language at the 200-level and above is the completion of ENG 111 and ENG 112.

ENG 215 Principles of News and Article Writing	3
0950-1120 (036-215-001)	Rudner

ENG 221 Communication for Business and Management	3
0800-0930 (036-221-001)	Buhr

ENG 321 The Communication of Technical Information	3
Prerequisite: Junior standing.	
0800-0930 (036-321-001) (036-321-002)	Staff
0950-1120 (036-321-003) (036-321-004)	Staff
1140-1310 (036-321-005) (036-321-006)	Staff

LITERATURE

The prerequisite for all literature courses is the completion of ENG 111 and ENG 112.

ENG 205 Studies in Great Works of Literature	3
The courses ENG 205, ENG 206, ENG 207, and ENG 208 are designed for students not enrolled in Humanities and Social Sciences.	
0950-1120 (036-205-001)	Staff

ENG 208 Studies in Fiction	3
The courses ENG 205, ENG 206, ENG 207, and ENG 208 are designed for students not enrolled in Humanities and Social Sciences.	
0800-0930 (036-208-001)	Staff
0950-1120 (036-208-002)	Staff
1140-1310 (036-208-003)	Staff

ENG 251 Major British Writers	3
Credit will not be given for both ENG 251 and either ENG 261 or ENG 262.	
1140-1310 (036-251-001)	Staff

ENG 252 Major American Writers	3
Credit will not be given for both ENG 252 and either ENG 265 or ENG 266.	
0950-1120 (036-252-001)	Staff

ENG 261 English Literature I	3
0950-1120 (036-261-001)	Staff

ENG 262 English Literature II	3
0800-0930 (036-262-001)	Staff

ENG 265 American Literature I	3
0800-0930 (036-265-001)	Staff
0950-1120 (036-265-002)	Staff
1140-1310 (036-265-003)	Staff
ENG 266 American Literature II	3
0800-0930 (036-266-001)	Staff
0950-1120 (036-266-002)	Staff
1140-1310 (036-266-003)	Staff
ENG 298 Special Projects in English	1-3
Hours arranged (036-298-001)	Staff
ENG 371 The Modern Novel	3
0800-0930 (036-371-001)	E. Clark
ENG 498 Special Topics in English	1-6
Prerequisite: Six hours in ENG above the freshman level.	
Hours arranged (036-498-001)	Staff
FOR GRADUATES ONLY	
<i>The prerequisite for all 600-level English courses is graduate standing unless additional prerequisites are noted.</i>	
ENG 630 Seventeenth-Century English Literature	3
1140-1310 (036-630-001)	Young
ENG 665 American Realism and Naturalism	3
0950-1120 (036-665-001)	Stein
ENG 698 Bibliography and Methodology	3
Prerequisite: Approved thesis topic.	
Hours arranged (036-698-001)	Thesis Director
ENG 699 Research in Literature (Thesis)	Credits Arranged
Prerequisite: Consent of graduate adviser.	
Hours arranged (036-699-001)	Thesis Director
TEN-WEEK SESSION	
FRESHMAN ENGLISH	
ENG 111E Composition and Rhetoric	3
General University requirement.	
Successful completion of ENG 111 requires a grade of C or better.	
1745-1930 MW (036-111-051)	Staff
ENG 112E Composition and Reading	3
General University requirement.	
Prerequisite: A grade of C or better in ENG 111.	
1945-2130 MW (036-112-051)	Staff
WRITING AND LANGUAGE	
<i>The prerequisite for all courses in writing and language at the 200-level and above is the completion of ENG 111 and ENG 112.</i>	
ENG 321E The Communication of Technical Information	3
Prerequisite: Junior standing	
1745-1930 TuTh (036-321-051)	Staff
1945-2130 TuTh (036-321-052)	Staff

LITERATURE

The prerequisite for all literature courses is the completion of ENG 111 and ENG 112.

ENG 208E Studies in Fiction	3
The courses ENG 205, ENG 206, ENG 207, and ENG 208 are designed for students not enrolled in Humanities and Social Sciences.	
1745-1930 MW (036-208-051)	Staff
1945-2130 MW (036-208-052)	Staff
ENG 262E English Literature II	3
1745-1930 MW (036-262-051)	Staff
ENG 265E American Literature I	3
1745-1930 TuTh (036-265-051)	Staff
ENG 266E American Literature II	3
1945-2130 TuTh (036-266-051)	Staff

Entomology

FIRST SESSION

ENT 590 Special Problems	Credits Arranged
Prerequisite: Consent of Instructor	
Hours arranged (038-590-001)	Staff
ENT 699 Research	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (038-699-001)	Staff

SECOND SESSION

ENT 590 Special Problems	Credits Arranged
Prerequisite: Consent of Instructor	
Hours arranged (038-590-001)	Staff
ENT 591 Special Topics in Entomology: Field Ecology/Natural History	1
Prerequisite: Graduate standing	
Hours arranged (038-591-001)	Gould/Neunzig
ENT 592 Agricultural Entomology Practicum	3
Prerequisite: Economic entomology (ENT 562 recommended)	
Hours arranged (038-592-001)	Bradley
ENT 699 Research	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (038-699-001)	Staff

Foreign Languages & Literatures

FRENCH

FIRST SESSION

\$ FLF 101 Elementary French I	3
0950-1120 (064-101-001)	Paschal
0950-1120 (064-101-002)	Witt
0950-1120 (064-101-003)	Green
\$ FLF 101E Elementary French I	3
1745-1930 MTuWTh (064-101-004)	Tronel

\$ FLF 102 Elementary French II	3
Prerequisite: FLF 101	
0800-0930 (064-102-001)	Green
0800-0930 (064-102-002)	Paschal
\$ FLF 201 Intermediate French I	3
Prerequisite: FLF 102 or FLF 105	
1140-1310 (064-201-001)	Witt
1140-1310 (064-201-002)	Tronel
SECOND SESSION	
\$ FLF 102 Elementary French II	3
Prerequisite: FLF 101	
0800-0930 (064-102-001)	Malinowski
0800-0930 (064-102-002)	Stack
\$ FLF 102E Elementary French II	3
Prerequisite: FLF 101	
1745-1930 MTuWTh (064-102-003)	Ahl
\$ FLF 201 Intermediate French I	3
Prerequisite: FLF 102 or FLF 105	
0950-1120 (064-201-001)	Stack
0950-1120 (064-201-002)	Hammond
FLF 202 Intermediate French II	3
Prerequisite: FLF 201	
0800-0930 (064-202-001)	Hammond

GERMAN

FIRST SESSION

\$ FLG 101 Elementary German I	3
0950-1120 (065-101-001)	Simonsen
\$ FLG 201 Intermediate German I	3
Prerequisite: FLG 102. Credit for both FLG 201 and FLG 210 is not allowed.	
0800-0930 (065-201-001)	Simonsen

SECOND SESSION

\$ FLG 102 Elementary German II	3
Prerequisite: FLG 101	
0950-1120 (065-102-001)	B. Rollins

SPANISH

FIRST SESSION

\$ FLS 101 Elementary Spanish I	3
0800-0930 (068-101-001)	Cortes
0950-1120 (068-101-002)	Cortes
0950-1120 (068-101-003)	Staff
\$ FLS 101E Elementary Spanish I	3
1545-1730 MTuWTh (068-101-004)	Alonso
\$ FLS 102 Elementary Spanish II	3
Prerequisite: FLS 101	
0800-0930 (068-102-001)	Staff
0950-1120 (068-102-002)	Jezierski
1140-1310 (068-102-003)	Jezierski

\$ FLS 201 Intermediate Spanish I	3
Prerequisite: FLS 102 or FLS 105	
0950-1120 (068-201-001)	Alder
1140-1310 (068-201-002)	Alder
\$ FLS 201E Intermediate Spanish I	3
Prerequisite: FLS 102 or FLS 105	
1745-1930 MTuWTh (068-201-003)	Alonso
SECOND SESSION	
\$ FLS 101 Elementary Spanish I	3
0800-0930 (068-101-001)	Wright
0950-1120 (068-101-002)	Wright
\$ FLS 102 Elementary Spanish II	3
Prerequisite: FLS 101	
0800-0930 (068-102-001)	G. Gonzalez
0800-0930 (068-102-002)	Kelly
0950-1120 (068-102-003)	G. Gonzalez
0950-1120 (068-102-004)	Kelly
\$ FLS 201 Intermediate Spanish I	3
Prerequisite: FLS 102 or FLS 105	
0800-0930 (068-201-001)	Milani
0950-1120 (068-201-002)	Malinowski
0950-1120 (068-201-003)	Lioret
FLS 202 Intermediate Spanish II	3
Prerequisite: FLS 201	
0950-1120 (068-202-001)	Milani
FLS 308 Spanish Conversation and Reading	3
Prerequisite: FLS 202	
1140-1310 (068-308-001)	Lioret

Forestry

FIRST SESSION

\$ FOR 111 Introduction to Field Forestry	2
Summer Pre-Camp (May 11-May 22)	
Open only to students transferring to a forestry major.	
0800-1700 (040-111-001)	Gregory/Cooper
\$ FOR 491 Senior Problems in Forestry	1-6
Prerequisite: Consent of department	
Hours arranged (040-491-001)	Staff
\$ FOR 591 Forestry Problems	Credits Arranged
Prerequisite: Advanced undergraduate or Graduate standing	
Hours arranged (040-591-001)	Staff
\$ FOR 691 Graduate Seminar	1
Prerequisite: Graduate standing	
Hours arranged (040-691-001)	Perry
\$ FOR 692 Advanced Forest Management Problems	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (040-692-001)	Staff
\$ FOR 699 Problems and Research	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (040-699-001)	Staff

SECOND SESSION

\$ FOR 491 Senior Problems in Forestry	1-6
Prerequisite: Consent of department	
Hours arranged (040-491-001)	Staff
\$ FOR 591 Forestry Problems	Credits Arranged
Prerequisite: Advanced undergraduate or Graduate standing	
Hours arranged (040-591-001)	Staff
\$ FOR 691 Graduate Seminar	1
Prerequisite: Graduate standing	
Hours arranged (040-691-001)	Perry
\$ FOR 692 Advanced Forest Management Problems	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (040-692-001)	Staff
\$ FOR 699 Problems and Research	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (040-699-001)	Staff

TEN-WEEK SESSION

\$ FOR 204 Silviculture	2
Summer Camp	
0800-1700 (040-204-051)	Jervis
\$ FOR 261 Forest Biology	2
Summer Camp	
Prerequisites: ENG 112, MA 114, BO 200 or equivalents, FOR 110, FOR 212. Transfer students FOR 111.	
0800-1700 (040-261-052)	Braham
\$ FOR 264 Forest Protection	2
Summer Camp	
Prerequisite: Junior standing in FOR	
0800-1700 (040-264-053)	Farrier/Grand
\$ FOR 274 Mapping and Mensuration	3
Summer Camp	
Prerequisites: MA 114, FOR 110 and FOR 212 or FOR 111 for transfer students.	
0800-1700 (040-274-054)	Jervis/Steensen
\$ FOR (FW) 310 Fisheries and Wildlife Inventory and Management	6
(See Fisheries and Wildlife)	

Food Science

FIRST SESSION

FS 491 Special Topics in Food Science	1-6
Prerequisites: Twelve hours of Food Science and Consent of Instructor	
Hours arranged (039-491-001)	Staff
FS 591 Special Problems in Food Science	1-6
Prerequisite: Senior or Graduate standing	
Hours arranged (039-591-001)	Staff
FS 691 Special Research Problems in Food Science	Credits Arranged
Hours arranged (039-691-001)	Staff
FS 699 Research in Food Science	Credits Arranged
Hours arranged (039-699-001)	Staff

SECOND SESSION

FS 491 Special Topics in Food Science	1-6
Prerequisites: Twelve hours of Food Science and Consent of Instructor	
Hours arranged (039-491-001)	Staff
FS 591 Special Problems in Food Science	1-6
Prerequisite: Senior or Graduate standing	
Hours arranged (039-591-001)	Staff
FS 691 Special Research Problems in Food Science	Credits Arranged
Hours arranged (039-691-001)	Staff
FS 699 Research in Food Science	Credits Arranged
Hours arranged (039-699-001)	Staff

Fisheries and Wildlife

FIRST SESSION

FW (ZO) 221 Conservation of Natural Resources	3
0950-1120 (051-221-001)	Zimmerman

TEN-WEEK SESSION

\$ FW (FOR) 310 Fisheries and Wildlife Inventory and Management	6
Summer Camp	
Prerequisites: FW (ZO) 353 or FW (ZO) 420; Junior or Senior standing	
0800-1700 (051-310-051)	Staff

Graphic Communications

FIRST SESSION

GC 101 Engineering Graphics I	2
0800-0930 (098-101-001)	Ross
0800-0930 (098-101-002)	Patterson
0950-1120 (098-101-003)	Ross
0950-1120 (098-101-004)	Patterson

SECOND SESSION

GC 101 Engineering Graphics I	2
0800-0930 (098-101-001)	Gull
0800-0930 (098-101-002)	Webb
0950-1120 (098-101-003)	Gull
0950-1120 (098-101-004)	Webb

Genetics

FIRST SESSION

GN 301 Genetics in Human Affairs	3
Prerequisite: Students should have Sophomore standing	
0800-0930 (041-301-001)	McKenzie
0950-1120 (041-301-002)	McKenzie
GN 411 Principles of Genetics	3
Prerequisites: BS 100, Junior standing	
1140-1310 (041-411-001)	Reid

GN 695 Special Problems in Genetics	1-3
Prerequisites: Advanced Graduate standing and Consent of Instructor	
Hours arranged (041-695-001)	Staff

GN 699 Research	Credits Arranged
Prerequisites: Graduate standing, Consent of Advisor	
Hours arranged (041-699-001)	Staff

SECOND SESSION

GN 695 Special Problems in Genetics	1-3
Prerequisites: Advanced Graduate standing and Consent of Instructor	
Hours arranged (041-695-001)	Staff

GN 699 Research	Credits Arranged
Prerequisites: Graduate standing, Consent of Advisor	
Hours arranged (041-699-001)	Staff

History

FIRST SESSION

HI 205 Western Civilization Since 1400	3
0950-1120 (044-205-001)	Novak

HI 207 Ancient World to 180 A.D.	3
0800-0930 (044-207-001)	Newby

HI 208 The Middle Ages	3
0950-1120 (044-208-001)	Newby
1140-1310 (044-208-002)	Novak

HI 242 United States: 1783-1845	3
0950-1120 (044-242-001)	King

HI 243 United States: 1845-1914	3
0800-0930 (044-243-001)	Staff
1140-1310 (044-243-002)	King

HI 244 United States Since 1914	3
0800-0930 (044-244-001)	Hobbs
0950-1120 (044-244-002)	Staff
1140-1310 (044-244-003)	Staff

HI (EB) 371 Evolution of the American Economy	3
(See Economics and Business)	

HI 452 Recent America	3
Prerequisite: Three hours of History	
0950-1120 (044-452-001)	Hobbs

HI 498 Independent Study in History	1-6
Prerequisite: Three hours of History	
Hours arranged (044-498-001)	Staff

HI 598 Special Topics in History	1-6
Prerequisite: Six hours of advanced History or equivalent	
Hours arranged (044-598-001)	Staff

HI 699 Research in History	Credits Arranged
Prerequisite: Six hours of advanced History or equivalent	
Hours arranged (044-699-001)	Staff

SECOND SESSION

HI 207 Ancient World to 180 A.D. 0800-0930 (044-207-001)	3 Sack
HI 208 The Middle Ages 0950-1120 (044-208-001)	3 Staff
HI 216 Latin America Since 1826 0950-1120 (044-216-001)	3 Beezley
HI 243 United States: 1845-1914 0800-0930 (044-243-001) 1140-1310 (044-243-002)	3 Crisp Smith
HI 244 United States Since 1914 0950-1120 (044-244-001)	3 Beers
HI 333 History of American Sport 0800-0930 (044-333-001)	3 Beezley
HI 454 History of U.S. Foreign Relations, 1900-Present Prerequisite: Three hours of History. Credit for both HI 454 and HI 554 will not be allowed. 1140-1310 (044-454-001)	3 Beers
HI 461 Civilization of the Old South Prerequisite: Three hours of History 0950-1120 (044-461-001)	3 Crisp
HI 498 Independent Study in History Prerequisite: Three hours in History Hours arranged (044-498-001)	1-6 Staff
HI 554 History of U.S. Foreign Relations, 1900-Present Prerequisite: Six hours of advanced History or equivalent. Credit in both HI 454 and HI 554 is not allowed. 1140-1310 (044-554-001)	3 Beers
HI 561 Civilization of the Old South Prerequisite: Six hours of advanced History (400 level or above) or equivalent. Credit in both HI 461 and HI 561 is not allowed. 0950-1120 (044-561-001)	3 Crisp
HI 598 Special Topics in History Prerequisite: Six hours of advanced History or equivalent Hours arranged (044-598-001)	1-6 Staff
HI 699 Research in History Prerequisite: Six hours of advanced History or equivalent Hours arranged (044-699-001)	Credits Arranged Staff

Horticultural Science

FIRST SESSION

HS 100 Home Horticulture 0950-1120 (045-100-001)	3 Lane
\$ HS 400 Residential Landscaping Prerequisites: DF 234; HS 211, HS 212, HS 342; HS 416 or DN 433; SSC 200; DN 257, DN 430. Seniors in the Landscape Horticulture area of concentration given priority. 0900-1400 (045-400-001)	6 Hooker

HS 495 Special Topics in Horticultural Science	1-6
Hours arranged (045-495-001)	Staff
HS 595 Special Topics in Horticultural Science	1-6
Prerequisite: Consent of Instructor	
Hours arranged (045-595-001)	Staff
HS 599 Research Principles	Credits Arranged
Prerequisite: Consent of Instructor	
Hours arranged (045-599-001)	Staff
HS 695 Graduate Topics in Horticultural Science	1-6
Prerequisite: Consent of Instructor	
Hours arranged (045-695-001)	Staff
HS 699 Research	Credits Arranged
Prerequisites: Graduate standing in Horticulture, Consent of Advisory Committee Chairman	
Hours arranged (045-699-001)	Staff
SECOND SESSION	
\$ HS 371 Interior Landscapes	3
Prerequisites: BS 100 or BO 200; Second Semester Sophomore standing or Consent of Instructor.	
LR 1020-1120 (045-371-001)	Lane
LB 1340-1650 MW (045-371-101)	
HS 495 Special Topics in Horticultural Science	1-6
Hours arranged (045-495-001)	Staff
HS 595 Special Topics in Horticultural Science	1-6
Prerequisite: Consent of Instructor	
Hours arranged (045-595-001)	Staff
HS 599 Research Principles	Credits Arranged
Prerequisite: Consent of Instructor	
Hours arranged (045-599-001)	Staff
HS 695 Graduate Topics in Horticultural Science	1-6
Prerequisite: Consent of Instructor	
Hours arranged (045-695-001)	Staff
HS 699 Research	Credits Arranged
Prerequisite: Graduate standing in Horticulture, Consent of Advisory Committee Chairman	
Hours arranged (045-699-001)	Staff

Industrial Arts

FIRST SESSION

\$ IA 115 Wood Processing I	3
1340-1620 (047-115-001)	Haynie
\$ IA 122 Metal Technology I	3
1020-1310 (047-122-001)	Haynie
IA 592 Special Problems Industrial Arts: Developing Innovative Facilities for Teaching Technology Education	3
Prerequisite: One term of student teaching or equivalent	
0900-1200 and 1400-1700 (047-592-001)	Wenig
June 10-June 24—Two-Week Course—Final Exam June 24	

SECOND SESSION

\$ IA 351 General Ceramics
1020-1310 (047-351-001)

3
Peterson

Industrial Engineering

FIRST SESSION

IE 311 Engineering Economic Analysis

3

Prerequisite: MA 102 (non-engineering students may use MA 112 or MA 113)
0800-0930 (049-311-001)

Ege

\$ IE 351 Manufacturing Engineering

3

Prerequisites: MAT 201 and GC 101

LR 0800-0930 (049-351-001)

Sanii

LB 1340-1620 TuTh (049-351-101)

\$ IE 361 Deterministic Models in Industrial Engineering

3

Prerequisite: MA 303 or MA 405. For IE, ECE, and CSC majors and minors only.

0950-1120 (049-361-001)

Bernhard

IE 495 Project Work in Industrial Engineering

1-6

Prerequisite: Senior standing

Hours arranged (049-495-001)

Staff

IE 591 Project Work

1-6

Prerequisite: Graduate standing

Hours arranged (049-591-001)

Staff

IE 651 Special Studies in Industrial Engineering

Credits Arranged

Prerequisite: Graduate standing

Hours arranged (049-651-001)

Staff

IE 699 Industrial Engineering Research

Credits Arranged

Prerequisite: Graduate standing

Hours arranged (049-699-001)

Staff

SECOND SESSION

IE 311 Engineering Economic Analysis

3

Prerequisite: MA 102 (non-engineering students may use MA 112 or MA 113)

0950-1120 (049-311-001)

Bernhard

IE 401 Stochastic Models in Industrial Engineering

3

Prerequisites: An introductory course in probability and/or math statistics. For IE, ECE, and CSC majors and IE minors only.

0950-1120 (049-401-001)

Hodge

IE 443 Quality Control

3

Prerequisite: ST 361

LR 0800-0930 (049-443-001)

Prak

PR 1340-1550 MW (049-443-201)

IE 495 Project Work in Industrial Engineering

1-6

Prerequisite: Senior standing

Hours arranged (049-495-001)

Staff

IE 591 Project Work

1-6

Prerequisite: Graduate standing

Hours arranged (049-591-001)

Staff

IE 651 Special Studies in Industrial Engineering

Prerequisite: Graduate standing

Hours arranged (049-651-001)

Credits Arranged

Staff

IE 699 Industrial Engineering Research

Prerequisite: Graduate standing

Hours arranged (049-699-001)

Credits Arranged

Staff

Landscape Architecture**FIRST SESSION****LAR 595 Independent Study**

1-3

Prerequisite: Graduate standing

Hours arranged (052-595-001)

Sullivan

LAR 691 Degree Seminar

0

Prerequisite: Three LAR 600 studios

Hours arranged (052-691-001)

Sullivan

\$ LAR 698 Advanced Research Projects

2-6

Prerequisite: Two LAR 600 studios or Consent of Instructor

Hours arranged (052-698-001)

Sullivan

SECOND SESSION**LAR 595 Independent Study**

1-3

Prerequisite: Graduate standing

Hours arranged (052-595-001)

Sullivan

LAR 691 Degree Seminar

0

Prerequisite: Three LAR 600 studios

Hours arranged (052-691-001)

Sullivan

\$ LAR 698 Advanced Research Projects

2-6

Prerequisite: Two LAR 600 studios or Consent of Instructor

Hours arranged (052-698-001)

Sullivan

Mathematics**FIRST SESSION****MA 102 Analytic Geometry and Calculus I**

4

Prerequisite: MA 111 or equivalent completed in high school

Credit not allowed for more than one of MA 102, MA 112, MA 113.

0730-0940 (054-102-001) (054-102-002) (054-102-003)

Staff

1020-1230 (054-102-004) (054-102-005) (054-102-006)

Staff

MA 111 Algebra and Trigonometry

4

Credit is not allowed for both MA 100 and MA 111. For students in Engineering, Physical and Mathematical Sciences, Design, Biological and Agricultural Engineering (Science program), Biological Sciences (all options), and Mathematics Education, Science Education, credit in MA 111 does not count toward graduation requirements.

0730-0940 (054-111-001) (054-111-002)

Staff

1020-1230 (054-111-003) (054-111-004) (054-111-005)

Staff

MA 112 Analytic Geometry and Calculus A

4

Prerequisite: MA 111 or equivalent completed in high school

Credit is not allowed for more than one of MA 102, MA 112, MA 113.

0730-0940 (054-112-001)

Staff

1020-1230 (054-112-002)

Staff

MA 113 Elements of Calculus	4
Prerequisite: MA 111 or equivalent completed in high school	
Credit is not allowed in more than one of MA 102, MA 112, MA 113. MA 113 may not be substituted for MA 102 as a curricular requirement.	
0730-0940 (054-113-001) (054-113-002)	Staff
MA 114 Introduction to Finite Mathematics With Applications	3
Prerequisite: MA 111 or equivalent completed in high school	
0800-0930 (054-114-001) (054-114-002)	Staff
MA 115 Basic Algebra	4
Credit in MA 115 is not allowed if student has prior credit for MA 102, MA 111, MA 112, MA 113, or MA 114. Credit for graduation is not given for MA 115 in any curricula.	
1020-1230 (054-115-001)	W. Waters
MA 122 Mathematics of Finance	3
Prerequisite: MA 115 or equivalent completed in high school	
0800-0930 (054-122-001) (054-122-002)	Staff
MA 201 Analytic Geometry and Calculus II	4
Prerequisite: MA 102	
0730-0940 (054-201-001) (054-201-002)	Staff
1020-1230 (054-201-004) (054-201-005)	Staff
MA 201S Analytic Geometry and Calculus II	4
Prerequisites: MA 102S, EE major	
0730-0940 (054-201-007)	Staff
MA 202 Analytic Geometry and Calculus III	4
Prerequisite: MA 201	
0730-0940 (054-202-001) (054-202-002)	Staff
1020-1230 (054-202-003) (054-202-004)	Staff
MA 225 Structure of the Real Number System	3
Prerequisite: MA 201	
0800-0930 (054-225-001)	Staff
MA 301 Applied Differential Equations I	3
Prerequisite: MA 202	
0800-0930 (054-301-001) (054-301-002)	Staff
1140-1310 (054-301-003) (054-301-004)	Staff
MA 405 Introduction to Linear Algebra and Matrices	3
Prerequisite: One year of calculus	
0800-0930 (054-405-001) (054-405-002)	Staff
1140-1310 (054-405-003)	Staff
MA 421 Introduction to Probability	3
Prerequisite: One year of calculus	
1140-1310 (054-421-001)	Staff
MA 501 Advanced Mathematics for Engineers and Scientists I	3
Prerequisite: MA 301 or equivalent. Credit for this course and MA 401 is not allowed.	
1140-1310 (054-501-001)	Staff
MA 511 Advanced Calculus I	3
Prerequisite: MA 301. May not be taken for credit by undergraduate mathematics majors.	
1140-1310 (054-511-001)	Staff
MA 512 Advanced Calculus II	3
Prerequisite: MA 301	
1140-1310 (054-512-001)	Staff

MA 513 Introduction to Complex Variables	3
Prerequisite: MA 202	
0800-0930 (054-513-001)	Staff
MA 697 Master's Project	3
Hours arranged (054-697-001)	Franke
MA 699 Research	Credits Arranged
Hours arranged (054-699-001)	Franke
SECOND SESSION	
MA 100 Precalculus Trigonometry	2
Credit not allowed for both MA 100 and MA 111. For students in Engineering, Physical and Mathematical Sciences, Design, Biological and Agricultural Engineering (Science program), Biological Sciences (all options), and Mathematics Education, Science Education, credit in MA 100 does not count toward graduation requirements.	
0730-0835 (054-100-001) (054-100-002)	Staff
MA 102 Analytic Geometry and Calculus I	4
Prerequisite: MA 111 or equivalent completed in high school	
Credit not allowed for more than one of MA 102, MA 112, MA 113.	
0730-0940 (054-102-001)	Staff
1020-1230 (054-102-002) (054-102-003)	Staff
MA 111 Algebra and Trigonometry	4
Credit is not allowed for both MA 100 and MA 111. For students in Engineering, Physical and Mathematical Sciences, Design, Biological and Agricultural Engineering (Science program), Biological Sciences (all options) and Mathematics Education, Science Education, credit in MA 111 does not count toward graduation requirements.	
0730-0940 (054-111-001) (054-111-002)	Staff
1020-1230 (054-111-004) (054-111-005) (054-111-006)	Staff
MA 112 Analytic Geometry and Calculus A	4
Prerequisite: MA 111 or equivalent completed in high school	
Credit is not allowed in more than one of MA 102, MA 112, MA 113.	
1020-1230 (054-112-001)	Staff
MA 113 Elements of Calculus	4
Prerequisite: MA 111 or equivalent completed in high school	
Credit is not allowed in more than one of MA 102, MA 112, MA 113. MA 113 may not be substituted for MA 102 as a curricular requirement.	
1020-1230 (054-113-001) (054-113-002)	Staff
MA 114 Introduction to Finite Mathematics with Applications	3
Prerequisite: MA 111 or equivalent completed in high school	
0800-0930 (054-114-001) (054-114-002)	Staff
MA 115 Basic Algebra	4
Credit in MA 115 is not allowed if student has prior credit for MA 102, MA 111, MA 112, MA 113, or MA 114. Credit toward graduation is not given for MA 115 in any curricula.	
0730-0940 (054-115-001)	Staff
MA 201 Analytic Geometry and Calculus II	4
Prerequisite: MA 102	
0730-0940 (054-201-001) (054-201-002)	Staff
1020-1230 (054-201-003) (054-201-004)	Staff
MA 202 Analytic Geometry and Calculus III	4
Prerequisite: MA 201	
0730-0940 (054-202-001) (054-202-002)	Staff
1020-1230 (054-202-003) (054-202-004)	Staff

MA 202S Analytic Geometry and Calculus III	4
Prerequisite: MA 201S	
0730-0940 (054-202-005)	Staff
MA 212 Analytic Geometry and Calculus B	3
Prerequisite: MA 112	
1140-1310 (054-212-001)	Staff
MA 301 Applied Differential Equations I	3
Prerequisite: MA 202	
0800-0930 (054-301-001) (054-301-002)	Staff
1140-1310 (054-301-003) (054-301-004)	Staff
MA 401 Applied Differential Equations II	3
Prerequisite: MA 301. Credit for MA 401 and MA 501 will not be given.	
0800-0930 (054-401-001)	Staff
MA 405 Introduction to Linear Algebra and Matrices	3
Prerequisite: One year of calculus	
1140-1310 (054-405-001) (054-405-002)	Staff
MA 502 Advanced Mathematics for Engineers and Scientists II	3
Prerequisite: MA 301 or equivalent. Any student receiving credit for MA 502 may receive credit for, at most, one of the following: MA 405, MA 512, or MA 513.	
1140-1310 (054-502-001)	Staff
MA 512 Advanced Calculus II	3
Prerequisite: MA 301	
0800-0930 (054-512-001)	Staff
MA 697 Master's Project	3
Hours arranged (054-697-001)	Franke
MA 699 Research	Credits Arranged
Hours arranged (054-699-001)	Franke
TEN-WEEK SESSION	
MA 111E Algebra and Trigonometry	4
Credit is not allowed for both MA 100 and MA 111. For students in Engineering, Physical and Mathematical Sciences, Design, Biological and Agricultural Engineering (Science program), Biological Sciences (all options), and Mathematics Education, Science Education credit in MA 111 does not count toward graduation.	
1915-2150 MW (054-111-051) (054-111-052)	Staff
MA 113E Elements of Calculus	4
Prerequisite: MA 111 or equivalent completed in high school	
Credit is not allowed in more than one of MA 102, MA 112, MA 113. MA 113 may not be substituted for MA 102 as a curricular requirement.	
1915-2150 TuTh (054-113-051)	Staff
MA 114E Introduction to Finite Mathematics with Applications	3
Prerequisite: MA 111 or equivalent completed in high school	
1945-2130 MW (054-114-051)	Staff
MA (CSC) 322 Discrete Mathematical Structures	3
(See Computer Science)	

Mechanical and Aerospace Engineering

FIRST SESSION

MAE 206 Engineering Statics	3
Prerequisite: PY 205	
Corequisite: MA 202	
0800-0930 (055-206-001)	Brown
0950-1120 (055-206-002)	Staff
1140-1310 (055-206-003)	Staff
MAE 208 Engineering Dynamics	3
Prerequisite: MAE 206	
Corequisite: MA 301	
0950-1120 (055-208-001)	Staff
MAE 301 Engineering Thermodynamics I	3
Prerequisites: MA 202, PY 208 or PY 202	
0800-0930 (055-301-001)	Boles
0800-0930 (055-301-002)	Afify
0950-1120 (055-301-003)	Boles
0950-1120 (055-301-004)	Hodgson
1140-1310 (055-301-005)	Brown
MAE 302 Engineering Thermodynamics II	3
Prerequisite: A grade of C or better in MAE 301	
0950-1120 (055-302-001)	Afify
\$ MAE 305 Mechanical Engineering Laboratory I	1
Prerequisite: Junior standing in MAE	
1340-1750 TuTh (055-305-001)	Batton
1340-1750 MW (055-305-002)	Staff
1750-2200 MW (055-305-003)	Staff
1750-2200 TuTh (055-305-004)	Staff
MAE 308 Fluid Mechanics I	3
Prerequisites: MAE 206 or CE 213, MA 202	
0800-0930 (055-308-001)	Staff
1140-1310 (055-308-002)	Hodgson
MAE 310 Conduction and Radiation Heat Transfer	3
Prerequisites: MA 301 and a grade of C or better in MAE 301	
0950-1120 (055-310-001)	Staff
1140-1310 (055-310-002)	Leach
MAE 314 Solid Mechanics	3
Prerequisites: MAE 206, CE 213 or CE 214	
Corequisite: MAT 201	
0800-0930 (055-314-001)	Staff
1140-1310 (055-314-002)	Staff
MAE 316 Strength of Mechanical Components	3
Prerequisites: MAE 314; students in ME, AE, or NE only	
1140-1310 (055-316-001)	Hoy
MAE 410 Convective Heat Transfer and Fluid Flow	3
Prerequisites: MAE 301, MAE 308	
1140-1310 (055-410-001)	Staff
MAE 411 Machine Component Design	3
Prerequisites: MAE 315, MAE 316	
0800-0930 (055-411-001)	Maday

\$ MAE 435 Principles of Automatic Control	3
Prerequisite: MA 301	
0950-1120 (055-435-001)	Maday
MAE 586 Project Work in Mechanical Engineering	1-6
Hours arranged (055-586-001)	Staff
MAE 699 Mechanical Engineering Research	Credits Arranged
Prerequisites: Graduate standing in Mechanical Engineering and consent of advisor.	
Hours arranged (055-699-001)	Staff
SECOND SESSION	
MAE 206 Engineering Statics	3
Prerequisite: PY 205	
Corequisite: MA 202	
0950-1120 (055-206-001)	Garcia
1140-1310 (055-206-002)	Garcia
MAE 208 Engineering Dynamics	3
Prerequisite: MAE 206	
Corequisite: MA 301	
0800-0930 (055-208-001)	Staff
1140-1310 (055-208-002)	Staff
MAE 261 Aerospace Vehicle Performance	3
Prerequisites: MA 201, PY 205	
0800-0930 (055-261-001)	Hale
MAE 301 Engineering Thermodynamics I	3
Prerequisites: MA 202, PY 208 or PY 202	
0800-0930 (055-301-001) (055-301-002)	Staff
0950-1120 (055-301-003)	Staff
1140-1310 (055-301-004) (055-301-005)	Staff
MAE 302 Engineering Thermodynamics II	3
Prerequisite: A grade of C or better in MAE 301	
0800-0930 (055-302-001)	Leach
\$ MAE 306 Mechanical Engineering Laboratory II	1
Prerequisite: MAE 305	
1340-1750 TuTh (055-306-001)	Batton
1340-1750 MW (055-306-002)	Staff
1750-2200 MW (055-306-003)	Staff
1750-2200 TuTh (055-306-004)	Staff
MAE 308 Fluid Mechanics I	3
Prerequisites: MAE 206 or CE 213; MA 202	
0950-1120 (055-308-001)	Staff
MAE 314 Solid Mechanics	3
Prerequisites: MAE 206, CE 213 or CE 214	
Corequisite: MAT 201	
0800-0930 (055-314-001)	Smetana
0950-1120 (055-314-002)	Edwards
MAE 410 Convective Heat Transfer and Fluid Flow	3
Prerequisites: MAE 301, MAE 308	
0800-0930 (055-410-001)	Edwards
\$ MAE 435 Principles of Automatic Control	3
Prerequisite: MA 301	
0950-1120 (055-435-001)	Smetana

MAE 462 Flight Vehicle Stability and Control	3
Prerequisites: MAE 261, MAE 435	
0950-1120 (055-462-001)	Hale

MAE 586 Project Work in Mechanical Engineering	1-6
Hours arranged (055-586-001)	Staff

MAE 699 Mechanical Engineering Research	Credits Arranged
Prerequisites: Graduate standing in Mechanical Engineering and consent of advisor.	
Hours arranged (055-699-001)	Staff

TEN-WEEK SESSION

MAE 315 Dynamics of Machines	3
Prerequisite: A grade of C or better in MAE 208 and Junior standing in ME	
1000-1115 MWF (055-315-051)	Hoy

Materials Science and Engineering

FIRST SESSION

MAT 201 Structure and Properties of Engineering Materials	3
Prerequisite: CH 105	
LR 1200-1330 (061-201-001)	Staff
PR 1340-1620 TuTh (061-201-201) (061-201-202)	

\$ MAT 210 Experiments in Materials Engineering	1
Corequisite: MAT 201	
LB 1340-1650 MWF (061-210-001)	Staff

MAT 495 Materials Engineering Projects	1-6
Prerequisite: Junior or Senior standing	
Hours arranged (061-495-001)	Staff

MAT 595 Advanced Materials Experiments	1-3
Prerequisite: Senior or Graduate standing	
Hours arranged (061-595-001)	Staff

MAT 699 Materials Engineering Research	Credits Arranged
Hours arranged (061-699-001)	Staff

SECOND SESSION

\$ MAT 200 Mechanical Properties of Structural Materials	2
Prerequisites: CH 105 and the first course in ESM	
LR 1020-1120 MWF (061-200-001)	Fahmy
LB 1340-1650 MWF (061-200-101) (061-200-102)	

MAT 201 Structure and Properties of Engineering Materials	3
Prerequisite: CH 105	
LR 1200-1330 (061-201-001)	Fahmy
PR 1340-1620 TuTh (061-201-201) (061-201-202)	

MAT 495 Materials Engineering Projects	1-6
Prerequisite: Junior or Senior standing	
Hours arranged (061-495-001)	Staff

MAT 595 Advanced Materials Experiments	1-3
Prerequisite: Senior or Graduate standing	
Hours arranged (061-595-001)	Staff

MAT 699 Materials Engineering Research	Credits Arranged
Hours arranged (061-699-001)	Staff

Microbiology

FIRST SESSION

MB 490 Special Topics in Microbiology	1-3
Prerequisites: Three courses in Microbiology and permission of instructor	
Hours arranged (057-490-001)	Staff
MB 590 Topical Problems	Credits Arranged
Prerequisites: Graduate standing and Consent of Instructor	
Hours arranged (057-590-001)	Staff
MB 692 Special Problems in Microbiology	Credits Arranged
Hours arranged (057-692-001)	Staff
MB 699 Microbiology Research	Credits Arranged
Hours arranged (057-699-001)	Staff

SECOND SESSION

MB 490 Special Topics in Microbiology	1-3
Prerequisites: Three courses in Microbiology and permission of instructor	
Hours arranged (057-490-001)	Staff
MB 590 Topical Problems	Credits Arranged
Prerequisites: Graduate standing and Consent of Instructor	
Hours arranged (057-590-001)	Staff
MB 692 Special Problems in Microbiology	Credits Arranged
Hours arranged (057-692-001)	Staff
MB 699 Microbiology Research	Credits Arranged
Hours arranged (057-699-001)	Staff

Marine, Earth and Atmospheric Sciences

ATMOSPHERIC SCIENCE

FIRST SESSION

MEA 593M Special Topics	1-6
Prerequisite: Consent of staff	
Hours arranged (053-593-002)	Staff
MEA 695M Seminar	1
Prerequisite: Graduate standing	
Hours arranged (053-695-001),	Staff
MEA 699M Research	Credits Arranged
Prerequisites: Graduate standing and consent of advisory committee	
Hours arranged (053-699-003)	Staff

SECOND SESSION

MEA 493A Special Topics in Meteorology	3
Prerequisite: Consent of department	
0800-1040 (053-493-001)	Staff
MEA 493B Special Topics in Meteorology	3
Prerequisite: Consent of department	
1100-1340 (053-493-002)	Staff
MEA 593M Special Topics	1-6
Prerequisite: Consent of staff	
Hours arranged (053-593-003)	Staff

MEA 695M Seminar	1
Prerequisite: Graduate standing	
Hours arranged (053-695-001)	Staff
MEA 699M Research	Credits Arranged
Prerequisites: Graduate standing and consent of advisory committee	
Hours arranged (053-699-003)	Staff

MARINE SCIENCE

FIRST SESSION

MEA 693 Advanced Special Topics	1-3
Prerequisites: Graduate standing and consent of staff	
Hours arranged (053-693-001)	Staff
MEA 699S Research	Credits Arranged
Prerequisites: Graduate standing and consent of advisory committee	
Hours arranged (053-699-002)	Staff

SECOND SESSION

MEA 593S Special Topics	1-3
Prerequisite: Consent of Instructor	
Hours arranged (053-593-002)	Staff
MEA 693 Advanced Special Topics	1-3
Prerequisites: Graduate standing and consent of staff	
Hours arranged (053-693-001)	Staff
MEA 699S Research	Credits Arranged
Prerequisites: Graduate standing and consent of advisory committee	
Hours arranged (053-699-002)	Staff

EARTH SCIENCE

FIRST SESSION

MEA 101 General Physical Geology	3
Credit may not be obtained for both MEA 101 and MEA 120	
0800-0930 (053-101-001)	Staff
\$ MEA 110 Physical Geology Laboratory	1
Corequisite: MEA 101 or MEA 120	
1020-1230 MW (053-110-001)	Staff
1340-1550 TuTh (053-110-002)	Staff
MEA 465 Geologic Field Camp I	3
Prerequisites: MEA 351, MEA 440, MEA 452	
First part of six weeks out-of-state summer field camp. Both MEA 465 and MEA 466 must be taken in the same summer.	
Hours arranged (053-465-001)	Stoddard
MEA 593G Special Topics	1-6
Prerequisite: Consent of Instructor	
Hours arranged (053-593-001)	Staff
MEA 698 Geophysical Research	Credits Arranged
Prerequisite: Consent of Instructor	
Hours arranged (053-698-001)	Staff
MEA 699G Research	Credits Arranged
Prerequisite: Consent of Instructor	
Hours arranged (053-699-001)	Staff

SECOND SESSION

MEA 101 General Physical Geology	3
Credit may not be obtained for both MEA 101 and MEA 120	
0800-0930 (053-101-001)	Staff
\$ MEA 110 Physical Geology Laboratory	1
Corequisite: MEA 101 or MEA 120	
1020-1230 MW (053-110-001)	Staff
1340-1550 TuTh (053-110-002)	Staff
MEA 466 Geologic Field Camp II	3
Prerequisite: MEA 465	
Second part of six weeks out-of-state summer field camp. Both MEA 465 and MEA 466 must be taken in the same summer.	
Hours arranged (053-466-001)	Staff
MEA 593G Special Topics	1-6
Prerequisite: Consent of Instructor	
Hours arranged (053-593-001)	Staff
MEA 698 Geophysical Research	Credits Arranged
Prerequisite: Consent of Instructor	
Hours arranged (053-698-001)	Staff
MEA 699G Research	Credits Arranged
Prerequisite: Consent of Instructor	
Hours arranged (053-699-001)	Staff

Music

FIRST SESSION

MUS 200 Understanding Music	3
0800-0930 (069-200-001)	Bliss
0800-0930 (069-200-002)	Petters
0950-1120 (069-200-003)	Hammond
MUS 210 A Survey of Music in America	3
0800-0930 (069-210-001)	Hammond
MUS 220 Music of the 19th Century	3
0950-1120 (069-220-001)	Petters
MUS 320 Music of the Twentieth Century	3
0950-1120 (069-320-001)	Bliss

SECOND SESSION

MUS 200 Understanding Music	3
0800-0930 (069-200-001)	Ward
0800-0930 (069-200-002)	Kramer
0950-1120 (069-200-003)	Ward
0950-1120 (069-200-004)	Kramer

Nuclear Engineering

FIRST SESSION

NE 491 Special Topics in Nuclear Engineering	1-4
Prerequisite: Consent of Instructor	
Hours arranged (070-491-001)	Staff

NE 591 Special Topics in Nuclear Engineering I	3
Prerequisite: Consent of Instructor	
Hours arranged (070-591-001)	Staff
NE 691 Advanced Topics in Nuclear Engineering I	3
Prerequisite: Consent of Instructor	
Hours arranged (070-691-001)	Staff
NE 699 Research in Nuclear Engineering	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (070-699-001)	Staff

SECOND SESSION

\$ NE 202 Fundamentals of Nuclear Energy	4
Prerequisite: PY 208	
0950-1120 (070-202-001)	Stam
NE 491 Special Topics in Nuclear Engineering	1-4
Prerequisite: Consent of Instructor	
Hours arranged (070-491-001)	Staff
NE 591 Special Topics in Nuclear Engineering I	3
Prerequisite: Consent of Instructor	
Hours arranged (070-591-001)	Staff
NE 691 Advanced Topics in Nuclear Engineering I	3
Prerequisite: Consent of Instructor	
Hours arranged (070-691-001)	Staff
NE 699 Research in Nuclear Engineering	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (070-699-001)	Staff

Operations Research

FIRST SESSION

OR 591 Special Topics in Operations Research	1-3
Prerequisite: Consent of Instructor	
Hours arranged (073-591-001)	Staff
OR 691 Special Topics in Operations Research	3
Prerequisites: OR 501, OR (IE, MA) 505	
Hours arranged (073-691-001)	Staff
OR 699 Project in Operations Research	1-3
Hours arranged (073-699-001)	Staff

SECOND SESSION

OR 591 Special Topics in Operations Research	1-3
Prerequisite: Consent of Instructor	
Hours arranged (073-591-001)	Staff
OR 691 Special Topics in Operations Research	3
Prerequisites: OR 501, OR (IE, MA) 505	
Hours arranged (073-691-001)	Staff
OR 699 Project in Operations Research	1-3
Hours arranged (073-699-001)	Staff

Political Science & Public Administration

PUBLIC ADMINISTRATION

FIRST SESSION

PA 513E Financial Management in the Public Sector	3
Prerequisite: Graduate standing or PBS status	
1630-1830 MTuWTh (034-513-001)	Coe
PA 590 Readings and Research	1-3
Prerequisite: Graduate standing	
Hours arranged (034-590-001)	Staff
PA 612 The Budgetary Process	3
Prerequisites: Graduate standing or Management Development Certificate Program and six semester hours of 500-level course work	
0800-0930 (034-612-001)	Coe
PA 691 Internship in Public Affairs	1-6
Prerequisite: Minimum 9 hours graduate work	
Hours arranged (034-691-001)	Staff

SECOND SESSION

*PA 516E Public Policy Analysis	3
Prerequisite: Advanced undergraduate standing including 12 hours of political science, Graduate standing or PBS status	
1900-2200 MW (034-516-001)	Swiss
PA 590 Readings and Research	1-3
Prerequisite: Graduate standing	
Hours arranged (034-590-001)	Staff
PA 613E Government and Planning	3
Prerequisites: Graduate standing or Management Development Certificate Program and six semester hours of 500-level course work	
1900-2200 MTuTh (034-613-001)	Staff
**PA 614E Management Systems	3
Prerequisites: Graduate standing or Management Development Certificate Program and six semester hours of 500-level course work	
1900-2200 TuTh (034-614-001)	Swiss

*There will be additional class meetings on July 18 and August 5. The final examination will be on August 7.

**There will be additional class meetings on July 18, August 4, and August 6. The final examination will be on August 7.

POLITICAL SCIENCE

FIRST SESSION

PS 201 Introduction to American Government	3
0800-0930 (080-201-001)	Staff
0950-1120 (080-201-002)	Staff
PS 202 State and Local Government	3
0950-1120 (080-202-001)	Williams
PS 236 Issues and Global Politics	3
0950-1120 (080-236-001)	McClintock

PS 361 Introduction to Political Theory 0950-1120 (080-361-001)	3 Kessler
\$ PS 371 Research Methodology of Political Science Prerequisite: PS 271 or PS 201 or Consent of Instructor 0800-0930 (080-371-001)	3 Williams
PS 490 Readings and Research in Political Science Prerequisite: Consent of department Hours arranged (080-490-001)	1-6 Staff
PS 590 Readings and Research Prerequisite: Graduate standing or PBS status Hours arranged (080-590-001)	1-3 Staff
PS 699 Research in Politics Prerequisite: Graduate standing and approval of advisor Hours arranged (080-699-001)	Credits Arranged Staff
SECOND SESSION	
PS 201 Introduction to American Government 0800-0930 (080-201-001) 0950-1120 (080-201-002)	3 Gilbert Holtzman
PS 301 The President and Congress Prerequisite: PS 201 0800-0930 (080-301-001)	3 Holtzman
PS 331 U.S. Foreign Policy 0950-1120 (080-331-001)	3 Gilbert
PS 490 Readings and Research in Political Science Prerequisite: Consent of Department Hours arranged (080-490-001)	1-6 Staff
PS 590 Readings and Research Prerequisite: Graduate standing or PBS status Hours arranged (080-590-001)	1-3 Staff
TEN-WEEK SESSION	
PS 202E State and Local Government 1730-1930 MTh (080-202-051)	3 McClain
PS 491 Internship in Political Science Prerequisite: Consent of Instructor Hours arranged (080-491-051)	1-6 McClain
PS 631 Seminar in International Relations Prerequisite: Six semester hours of 500-level course work Hours arranged (080-631-051)	3 Soroos

Product Design

FIRST SESSION

\$ PD 400 Intermediate Product Design (Series) Prerequisite: DF 102. May not be taken more than six times. 0750-1300 (082-400-001)	6 Finkel
PD 595 Independent Study in Product Design Prerequisite: Graduate standing Hours arranged (082-595-001)	1-3 Foote

PD 691 Special Topics in Product Design	1-6
Prerequisite: Graduate standing	
Hours arranged (082-691-001)	Footen
SECOND SESSION	
PD 595 Independent Study in Product Design	1-3
Prerequisite: Graduate standing	
Hours arranged (082-595-001)	Staff
PD 691 Special Topics in Product Design	1-6
Prerequisite: Graduate standing	
Hours arranged (082-691-001)	Staff

Physical Education

FIRST SESSION

PE 100 (Coed) Health and Physical Fitness	1
0830-0930 (075-100-001)	Ormond
PE 112 Beginning Swimming	1
1300-1400 (075-112-001)	R. Smith
PE 221 Intermediate Swimming	1
Prerequisite: PE 113 or equivalent skill	
1400-1500 (075-221-001)	Chastain
PE 221E Intermediate Swimming	1
Prerequisite: PE 113 or equivalent skill	
1945-2045 MTuWTh (075-221-002)	Roberts
PE 223 Advanced Lifesaving	1
Prerequisite: PE 221 or equivalent skill	
1040-1140 (075-223-001)	Evans
PE 229 Swim Conditioning	1
Prerequisite: PE 221	
1300-1400 (075-229-001)	Chastain
PE 231 Body Conditioning and Aerobics	1
0940-1040 (075-231-001)	Chastain
1040-1140 (075-231-002)	Chastain
PE 237 Weight Training	1
0940-1040 (075-237-001)	R. Smith
1200-1300 (075-237-002)	R. Smith
PE 241 Angling	1
Additional Fee Assessed	
1300-1400 (075-241-001)	Attarian
PE 242 Badminton	1
0940-1040 (075-242-001)	Halstead
1040-1140 (075-242-002)	Halstead
PE 243 Bowling	1
\$38.00 Bowling Fee	
1300-1400 (075-243-001)	Cooper
1400-1500 (075-243-002)	Cooper

PE 245 Golf	1
0940-1040 (075-245-001)	Cooper
1040-1140 (075-245-002)	Cooper
1300-1400 (075-245-003)	Ormond
1400-1500 (075-245-004)	Ormond
PE 249 Tennis I	1
0830-0930 (075-249-001)	Davis
0940-1040 (075-249-002)	Davis
1200-1300 (075-249-003)	Evans
1300-1400 (075-249-004)	Evans
PE 251 Target Archery	1
0830-0930 (075-251-001)	R. Smith
1040-1140 (075-251-002)	Ormond
1200-1300 (075-251-003)	Attarian
PE 256 Racquetball	1
0940-1040 (075-256-001)	Evans
1040-1140 (075-256-002)	Shannon
1615-1715 MTuWTh (075-256-003)	Roberts
PE 256E Racquetball	1
1745-1845 MTuWTh (075-256-004)	Roberts
PE 258 Basic Rockclimbing	1
0830-0930 (075-258-001)	Attarian
0940-1040 (075-258-002)	Attarian
PE 265 Softball	1
1040-1140 (075-265-001)	J. B. Brown
1500-1600 MTuWTh (075-265-002)	Roberts
PE 269 Volleyball	1
1200-1300 (075-269-001)	Davis
1300-1400 (075-269-002)	Davis
SECOND SESSION	
PE 100 (Coed) Health and Physical Fitness	1
0830-0930 (075-100-001)	Raynor
PE 112 Beginning Swimming	1
1300-1400 (075-112-001)	Raynor
PE 226 Skin and Scuba Diving	2
Prerequisite: PE 221 or equivalent skill	
1400-1600 (075-226-001)	Goldberg
PE 237 Weight Training	1
0940-1040 (075-237-001)	Raynor
1040-1140 (075-237-002)	Raynor
PE 237E Weight Training	1
1945-2045 MTuWTh (075-237-003)	Bechtolt
PE 242 Badminton	1
0940-1040 (075-242-001)	Brothers
1040-1140 (075-242-002)	Brothers

PE 245 Golf	1
0940-1040 (075-245-001)	Gwyn
1040-1140 (075-245-002)	Gwyn
1200-1300 (075-245-003)	Brothers
1300-1400 (075-245-004)	Gwyn
1400-1500 (075-245-005)	Gwyn
PE 249 Tennis I	1
0830-0930 (075-249-001)	L. Smith
0940-1040 (075-249-002)	L. Smith
1200-1300 (075-249-003)	Cheek
1300-1400 (075-249-004)	Cheek
PE 251 Target Archery	1
0830-0930 (075-251-001)	Cheek
PE 256 Raquetball	1
1615-1715 MTuWTh (075-256-001)	Bechtolt
PE 256E Racquetball	1
1745-1845 MTuWTh (075-256-002)	Bechtolt
PE 265 Softball	1
0940-1040 (075-265-001)	Cheek
1500-1600 MTuWTh (075-265-002)	Bechtolt
PE 269 Volleyball	1
1200-1300 (075-269-001)	L. Smith
1300-1400 (075-269-002)	L. Smith
PE 280 Emergency Medical Care and First Aid	2
This course does not constitute credit toward meeting Physical Education requirements.	
1040-1140 (075-280-001)	Goldberg

Philosophy

FIRST SESSION

PHI 201 Logic	3
0800-0930 (074-201-001)	Auerbach
0950-1120 (074-201-002)	Metzger
PHI 205 Problems and Types of Philosophy	3
0800-0930 (074-205-001)	VanDeVeer
0950-1120 (074-205-002)	VanDeVeer
PHI 250 Practical Reasoning	3
0800-0930 (074-250-001)	Metzger
PHI 314 Issues in Business Ethics	3
0800-0930 (074-314-001)	Pierce
0950-1120 (074-314-002)	Pierce
PHI 335 Symbolic Logic	3
0950-1120 (074-335-001)	Auerbach
PHI 340 Philosophy of Science	3
0950-1120 (074-340-001)	Austin
1140-1310 (074-340-002)	Austin

SECOND SESSION

PHI 201 Logic	3
0800-0930 (074-201-001)	Levine
0950-1120 (074-201-002)	Levine
1140-1310 (074-201-003)	Levin
PHI 205 Problems and Types of Philosophy	3
0800-0930 (074-205-001)	Antony
0950-1120 (074-205-002)	Antony
1140-1310 (074-205-003)	Hambourger
PHI 305 Philosophy of Religion	3
0950-1120 (074-305-001)	Hambourger
PHI 321 Contemporary Moral Issues	3
0800-0930 (074-321-001)	Regan
0950-1120 (074-321-002)	Regan
PHI 335 Symbolic Logic	3
0950-1120 (074-335-001)	Levin

Physiology

FIRST SESSION

PHY 590 Special Problems in Physiology	Credits Arranged
Prerequisites: Graduate standing, Consent of Instructor	
Hours arranged (078-590-001)	Britt
PHY 699 Physiological Research	Credits Arranged
Prerequisites: Graduate standing, Consent of Instructor	
Hours arranged (078-699-001)	Britt

SECOND SESSION

PHY 699 Physiological Research	Credits Arranged
Prerequisites: Graduate standing, Consent of Instructor	
Hours arranged (078-699-001)	Britt

Poultry Science

FIRST SESSION

PO 495 Special Problems in Poultry Science	1-6
Prerequisites: Junior standing and Consent of Instructor	
Hours arranged (081-495-001)	Ort
PO 698 Special Problems in Poultry Science	1-6
Prerequisite: Graduate standing	
Hours arranged (081-698-001)	Ort
PO 699 Poultry Research	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (081-699-001)	Ort

SECOND SESSION

\$ PO (ANS) 204 Feeds and Feeding	4
(See Animal Science)	
PO 495 Special Problems in Poultry Science	1-6
Prerequisites: Junior standing and Consent of Instructor	
Hours arranged (081-495-001)	Ort

PO 698 Special Problems in Poultry Science	1-6
Prerequisite: Graduate standing	
Hours arranged (081-698-001)	Ort
PO 699 Poultry Research	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (081-699-001)	Ort

Plant Pathology

FIRST SESSION

PP 595 Special Problems in Plant Pathology	Credits Arranged
Prerequisite: Consent of Instructor	Maximum 6
Hours arranged (079-595-001)	Klarman
PP 699 Research in Plant Pathology	Credits Arranged
Prerequisites: Graduate standing and Consent of Instructor	
Hours arranged (079-699-001)	Klarman

SECOND SESSION

PP 595 Special Problems in Plant Pathology	Credits Arranged
Prerequisite: Consent of Instructor	Maximum 6
Hours arranged (079-595-001)	Klarman
PP 699 Research in Plant Pathology	Credits Arranged
Prerequisites: Graduate standing and Consent of Instructor	
Hours arranged (79-699-001)	Klarman

Psychology

FIRST SESSION

PSY 200 Introduction to Psychology	3
0800-0930 (083-200-001)	Hay
0800-0930 (083-200-002)	Pond
0950-1120 (083-200-003)	Pond
0950-1120 (083-200-004)	Cunningham
1140-1310 (083-200-005)	Cunningham
PSY 210 Psychological Analysis Applied to Current Problems	3
Prerequisite: PSY 200	
0950-1120 (083-210-001)	Smith
PSY 304 Educational Psychology	3
0800-0930 (083-304-001)	Greulich
0950-1120 (083-304-002)	Bingham
PSY 307 Industrial and Organizational Psychology	3
Prerequisite: PSY 200	
0800-0930 (083-307-001)	Reardin
PSY 370 Personality	3
Prerequisite: PSY 200	
1140-1310 (083-370-001)	Smith-Scott
PSY 376 Human Growth and Development	3
Prerequisite: PSY 200 or PSY 304	
0800-0930 (083-376-001)	Donley

PSY 475 Child Psychology	3
Prerequisite: PSY 200 or PSY 304	
0950-1120 (083-475-001)	Walker
1140-1310 (083-475-002)	Walker
PSY 499 Individual Study in Psychology	1-6
Prerequisite: Consent of Department	
Hours arranged (083-499-001)	Staff
PSY 599 Research Problems in Psychology	Credits Arranged
Prerequisite: Consent of Instructor	
Hours arranged (083-599-001)	Staff
PSY 693 Psychological Clinic Practicum	Maximum 12
Prerequisite: Twelve hours in graduate PSY, which must include clinical skill courses PSY 571 and PSY 672 and/or Consent of Instructor	
Hours arranged (083-693-001)	Staff
PSY 699 Thesis and Dissertation Research	Credits Arranged
Prerequisites: Graduate standing and Consent of Instructor	
Hours arranged (083-699-001)	Staff
SECOND SESSION	
PSY 200 Introduction to Psychology	3
0800-0930 (083-200-001)	Lee
0950-1120 (083-200-002)	Easley-Bowman
1140-1310 (083-200-003)	Stewart
1330-1500 (083-200-004)	Staff
PSY 304 Educational Psychology	3
0800-0930 (083-304-001)	Owen
0950-1120 (083-304-002)	Staff
PSY 376 Human Growth and Development	3
Prerequisite: PSY 200 or PSY 304	
0800-0930 (083-376-001)	Baker-Ward
0950-1120 (083-376-002)	Baker-Ward
PSY 470 Abnormal Psychology	3
Prerequisite: PSY 200 or PSY 304	
0950-1120 (083-470-001)	Erchul
PSY 476 Psychology of Adolescent Development	3
Prerequisite: PSY 200 or PSY 304	
0950-1120 (083-476-001)	Snyder
PSY 499 Individual Study in Psychology	1-6
Prerequisite: Consent of Department	
Hours arranged (083-499-001)	Staff
PSY 535 Tests and Measurements	3
Prerequisite: Six hours of PSY	
0800-0930 (083-535-001)	Westbrook
0950-1120 (083-535-002)	Westbrook
PSY 577 Adolescent Development	3
Prerequisite: Six hours of PSY or Consent of Instructor	
0800-0930 (083-577-001)	Snyder
PSY 599 Research Problems in Psychology	Credits Arranged
Prerequisite: Consent of Instructor	
Hours arranged (083-599-001)	Staff

PSY 693 Psychological Clinic Practicum	Maximum 12
Prerequisite: Twelve hours in graduate PSY, which must include clinical skill courses PSY 571 and PSY 672 and/or Consent of Instructor	
Hours arranged (083-693-001)	Staff
PSY 699 Thesis and Dissertation Research	Credits Arranged
Prerequisites: Graduate standing and Consent of Instructor	
Hours arranged (083-699-001)	Staff

Physics

FIRST SESSION

\$ PY 205 General Physics	4
Prerequisite: MA 102	
LR 0800-0930 (077-205-001)	Staff
LR 0950-1120 (077-205-002)	Staff
LB 0730-0940 MW (077-205-101)	
LB 1020-1230 MW (077-205-103)	
LB 1020-1230 TuTh (077-205-104)	
LB 1250-1500 MW (077-205-105)	
LB 1250-1500 TuTh (077-205-106)	
LB 1520-1730 MW (077-205-107)	
LB 1520-1730 TuTh (077-205-108)	
\$ PY 208 General Physics	4
Prerequisite: PY 205	
LR 0800-0930 (077-208-001)	Staff
LR 0950-1120 (077-208-002)	Staff
LB 0730-0940 MW (077-208-101)	
LB 1020-1230 MW (077-208-103)	
LB 1020-1230 TuTh (077-208-104)	
LB 1250-1500 MW (077-208-105)	
LB 1250-1500 TuTh (077-208-106)	
LB 1520-1730 MW (077-208-107)	
LB 1520-1730 TuTh (077-208-108)	
\$ PY 211 General Physics	4
Prerequisite: MA 111 or MA 116. Credit not allowed for both PY 211 and either PY 201 or PY 205.	
LR 0800-0930 (077-211-001)	Staff
LB 1250-1500 MW (077-211-101)	
LB 1250-1500 TuTh (077-211-102)	
\$ PY 212 General Physics	4
Prerequisite: PY 211. Credit not allowed for both PY 212 and either PY 202 or PY 208	
LR 0950-1120 (077-212-001)	Staff
LB 1250-1500 MW (077-212-101)	
LB 1250-1500 TuTh (077-212-102)	
PY 221 College Physics	5
Prerequisite: MA 111 or MA 115	
1020-1300 (077-221-001)	Staff
\$ PY 231 Physics for Non-Scientists	4
For Humanities and Social Sciences students only.	
LR 0950-1120 (077-231-001)	Staff
LB 1250-1500 MW (077-231-101)	
PY 407 Introduction to Modern Physics	3
Prerequisites: MA 202, PY 208	
0800-0930 (077-407-001)	Staff

PY 499 Special Problems in Physics	1-6
Prerequisite: Consent of Department	
Hours arranged (077-499-001)	Staff
PY 590 Special Topics in Physics	Credits Arranged
Prerequisite: Consent of Department	
Hours arranged (077-590-001)	Staff
PY 699 Research	Credits Arranged
Hours arranged (077-699-001)	Staff
SECOND SESSION	
\$ PY 205 General Physics	4
Prerequisite: MA 102	
LR 0800-0930 (077-205-001)	Staff
LR 0950-1120 (077-205-002)	Staff
LB 0730-0940 MW (077-205-101)	
LB 1020-1230 MW (077-205-103)	
LB 1020-1230 TuTh (077-205-104)	
LB 1250-1500 MW (077-205-105)	
LB 1250-1500 TuTh (077-205-106)	
LB 1520-1730 MW (077-205-107)	
\$ PY 208 General Physics	4
Prerequisite: PY 205	
LR 0800-0930 (077-208-001)	Staff
LR 0950-1120 (077-208-002)	Staff
LB 0730-0940 MW (077-208-101)	
LB 1020-1230 MW (077-208-103)	
LB 1020-1230 TuTh (077-208-104)	
LB 1250-1500 MW (077-208-105)	
LB 1250-1500 TuTh (077-208-106)	
LB 1520-1730 MW (077-208-107)	
\$ PY 211 General Physics	4
Prerequisite: MA 111 or MA 116. Credit not allowed for both PY 211 and either PY 201 or PY 205.	
LR 0950-1120 (077-211-001)	Staff
LB 1250-1500 MW (077-211-101)	
LB 1250-1500 TuTh (077-211-102)	
\$ PY 212 General Physics	4
Prerequisite: PY 211. Credit not allowed for both PY 212 and either PY 202 or PY 208.	
LR 0800-0930 (077-212-001)	Staff
LB 1250-1500 MW (077-212-101)	
LB 1250-1500 TuTh (077-212-102)	
PY 221 College Physics	5
Prerequisite: MA 111 or MA 115	
1020-1300 (077-221-001)	Staff
PY 499 Special Problems in Physics	1-6
Prerequisite: Consent of Department	
Hours arranged (077-499-001)	Staff
PY 590 Special Topics in Physics	Credits Arranged
Prerequisite: Consent of Department	
Hours arranged (077-590-001)	Staff
PY 699 Research	Credits Arranged
Hours arranged (077-699-001)	Staff

Religion

FIRST SESSION

REL 312 Introduction to the New Testament

0800-0930 (087-312-001)

0950-1120 (087-312-002)

3
VanderKam
VanderKam

SECOND SESSION

REL 300 Introduction to Religion

0800-0930 (087-300-001)

0950-1120 (087-300-002)

3
Mullin
Mullin

Recreation Resources Administration

FIRST SESSION

RRA 152 Introduction to Recreation

0800-0930 (085-152-001)

0950-1120 (085-152-002)

1140-1310 (085-152-003)

3
Sternloff
Sternloff
Love

RRA 475 Recreation and Park Internship

Prerequisites: Senior standing, RRA 359

Hours arranged (085-475-001)

9
Kirsch

RRA 591 Recreation Resources Problems

Prerequisite: Advanced undergraduate or Graduate standing

Hours arranged (085-591-001)

1-4
Staff

RRA 675 Field Studies in Recreation

Prerequisite: Minimum of nine hours graduate credit

Hours arranged (085-675-001)

1-4
Staff

RRA 692 Advanced Problems in Recreation

Prerequisite: Twelve hours RRA courses

Hours arranged (085-692-001)

Credits Arranged
Staff

RRA 699 Research in Recreation

Prerequisite: Twelve hours RRA courses

Hours arranged (085-699-001)

Credits Arranged
Staff

SECOND SESSION

RRA 591 Recreation Resources Problems

Prerequisite: Advanced undergraduate or Graduate standing

Hours arranged (085-591-001)

1-4
Staff

RRA 675 Field Studies in Recreation

Prerequisite: Minimum of nine hours Graduate credit

Hours arranged (085-675-001)

1-4
Staff

RRA 692 Advanced Problems in Recreation

Prerequisite: Twelve hours RRA courses

Hours arranged (085-692-001)

Credits Arranged
Staff

RRA 696 Seminar in Recreation Research

Prerequisite: RRA 501

Hours arranged (085-696-001)

1
Staff

RRA 699 Research in Recreation

Prerequisite: Twelve hours RRA courses

Hours arranged (085-699-001)

Credits Arranged
Staff

Sociology

FIRST SESSION

SOC 202 Principles of Sociology

0800-0930 (092-202-001) (092-202-002)

0950-1120 (092-202-003)

0950-1120 (092-202-004)

1140-1310 (092-202-005)

3
Staff
Staff
Della Fave
Staff

SOC 202E Principles of Sociology

1745-1930 MTuWTh (092-202-006)

3
Staff

SOC 203 Current Social Problems

0800-0930 (092-203-001)

3
Thomson

SOC 204 Sociology of Family

0800-0930 (092-204-001)

0950-1120 (092-204-002)

0950-1120 (092-204-003)

1140-1310 (092-204-004)

3
Staff
Uzzell
Staff
Uzzell

SOC 204E Sociology of Family

1745-1930 MTuWTh (092-204-005)

1945-2130 MTuWTh (092-204-006)

3
Risman
Risman

SOC 205 Work: Occupations and Professions

0950-1120 (092-205-001)

3
Devey

SOC 301 Human Behavior

Prerequisite: SOC 202 or PSY 200

0800-0930 (092-301-001)

0950-1120 (092-301-002)

3
Hyman
Hyman

SOC 301E Human Behavior

Prerequisite: SOC 202 or PSY 200

1745-1930 MTuWTh (092-301-003)

3
Staff

SOC 305 Racial and Ethnic Relations

Prerequisite: Three credits of SOC

1140-1310 (092-305-001)

3
Della Fave

SOC 306 Criminology

Prerequisite: Three credits of SOC

0950-1120 (092-306-001)

3
Hill

SOC 414 Social Class

Prerequisite: SOC 202

0800-0930 (092-414-001)

3
Devey

§ SOC 416 Research Methods

Prerequisites: Senior standing, ST 311 or Consent of Instructor

0950-1120 (092-416-001)

3
Thomson

SOC 425 Juvenile Delinquency

Prerequisite: SOC 202; SOC 301 desirable

1140-1310 (092-425-001)

3
Hill

SOC 498 Special Topics in Sociology

Prerequisite: Six hours of SOC above the 200 level

Hours arranged (092-498-001)

1-6
Walek

SOC 591 Special Topics in Sociology	1-6
Prerequisite: Consent of Instructor	
Hours arranged (092-591-001)	Moxley
SOC 595 Practicum in Sociology	3-6
Prerequisites: Graduate standing in the Master of Sociology program and 9 hours of SOC at the 500-600 level.	
Hours arranged (092-595-001)	Moxley
SOC 699 Research in Sociology	Credits Arranged
Prerequisite: Consent of chairman of graduate student committee	
Hours arranged (092-699-001)	Moxley
SECOND SESSION	
SOC 202 Principles of Sociology	3
0800-0930 (092-202-001) (092-202-002)	Staff
0950-1120 (092-202-003)	Staff
0950-1120 (092-202-004)	Marsh
1140-1310 (092-202-005)	Staff
SOC 202E Principles of Sociology	3
1745-1930 MTuWTh (092-202-006)	Staff
SOC 203 Current Social Problems	3
0950-1120 (092-203-001)	Staff
SOC 204 Sociology of Family	3
0800-0930 (092-204-001)	Troost
0800-0930 (092-204-002)	Staff
0950-1120 (092-204-003)	Troost
0950-1120 (092-204-004)	Staff
1140-1310 (092-204-005)	Staff
SOC 204E Sociology of Family	3
1745-1930 MTuWTh (092-204-006)	Staff
1945-2130 MTuWTh (092-204-007)	Staff
SOC 301 Human Behavior	3
Prerequisite: SOC 202 or PSY 200	
0800-0930 (092-301-001)	Staff
0950-1120 (092-301-002)	Brisson
SOC 305 Racial and Ethnic Relations	3
Prerequisite: Three credits of SOC	
0800-0930 (092-305-001)	Woodrum
SOC 306 Criminology	3
Prerequisite: Three credits of SOC	
0950-1120 (092-306-001)	Suval
SOC 415 Social Thought	3
Prerequisite: SOC 202	
0950-1120 (092-415-001)	Woodrum
SOC 498 Special Topics in Sociology	1-6
Prerequisite: Six hours of SOC above the 200 level	
Hours arranged (092-498-001)	Walek
SOC 501 Leadership	3
Prerequisite: SOC 202 or equivalent	
0800-0930 (092-501-001)	Brisson

SOC 515 Deviant Behavior	3
Prerequisite: Six hours SOC or ANT or graduate standing	
1140-1310 (092-515-001)	Suval
SOC 541 Social Systems and Planned Change	3
Prerequisite: Three hours SOC	
1745-1930 MTuWTh (092-541-001)	Marsh
SOC 591 Special Topics in Sociology	1-6
Prerequisite: Consent of Instructor	
Hours arranged (092-591-001)	Moxley
SOC 595 Practicum in Sociology	3-6
Prerequisites: Graduate standing in the Master of Sociology program and nine hours of SOC at 500-600 level.	
Hours arranged (092-595-001)	Moxley
SOC 699 Research in Sociology	Credits Arranged
Prerequisite: Consent of chairman of graduate study committee	
Hours arranged (092-699-001)	Moxley

Speech-Communication

FIRST SESSION

SP 101 Speech Improvement	3
Not accepted for area emphasis requirement in Public Communication	
0950-1120 (037-101-001)	Franklin
SP 103 Introduction to the Theatre	3
0800-0930 (037-103-001)	Staff
0950-1120 (037-103-002)	Staff
SP 110 Public Speaking	3
0800-0930 (037-110-001)	Franklin
0800-0930 (037-110-002)	Schrag
0950-1120 (037-110-003)	Schrag
0950-1120 (037-110-004)	Parker
1140-1310 (037-110-005)	Parker
SP 112 Interpersonal Communication	3
0800-0930 (037-112-001)	Staff
0800-0930 (037-112-002)	DeJoy
0950-1120 (037-112-003)	DeJoy
0950-1120 (037-112-004)	Leonard
1140-1310 (037-112-005)	Leonard
SP 146 Business and Professional Communication	3
0800-0930 (037-146-001)	Staff
SP 203 Theory and Practice of Acting	3
0950-1120 (037-203-001)	Staff
SP 204 Writing for the Electronic Media	3
0800-0930 (037-204-001)	Alchediak
SP 298 Special Projects in Speech-Communication— Intercultural Communication	3
0950-1120 (037-298-001)	Staff
SP 312 Patterns of Miscommunication	3
0950-1120 (037-312-001)	Munn

SP 342 Interviewing	3
Prerequisite: Junior standing	
0800-0930 (037-342-001)	Munn
SP 354 Portable Video Production	3
Preference is given to Speech-Communication majors	
0950-1120 (037-354-001)	Alchediak
SP 498 Special Topics in Speech-Communication	1-3
Prerequisites: 9 hours of SP and Junior standing and permission of the Department.	
Hours arranged (037-498-001)	Staff

SECOND SESSION

SP 103 Introduction to the Theatre	3
0950-1120 (037-103-001)	Staff
SP 110 Public Speaking	3
0800-0930 (037-110-001)	Camp
0950-1120 (037-110-002)	Camp
0950-1120 (037-110-003)	Long
1140-1310 (037-110-004)	Staff
SP 112 Interpersonal Communication	3
0800-0930 (037-112-001)	Staff
0950-1120 (037-112-002)	Anderson
0950-1120 (037-112-003)	Staff
1140-1310 (037-112-004)	Staff
SP 146 Business and Professional Communication	3
0800-0930 (037-146-001)	Staff
SP 203 Theory and Practice of Acting	3
0800-0930 (037-203-001)	Staff
SP 214 Introduction to Audio Production	3
Preference is given to Speech-Communication majors.	
1140-1310 (037-214-001)	Funkhouser
SP 304 Survey of Telecommunication	3
0950-1120 (037-304-001)	Funkhouser
SP 322 Nonverbal Communication	3
Prerequisite: SP 112	
1140-1310 (037-322-001)	Anderson
SP 498 Special Topics in Speech-Communication	1-3
Prerequisites: 9 hours of SP and Junior standing and permission of the Department	
Hours arranged (037-498-001)	Staff

Statistics

FIRST SESSION

ST 311 Introduction to Statistics	3
0950-1120 (094-311-001)	Staff
ST (EB) 350 Economics and Business Statistics	3
(See Economics and Business)	
ST 361 Introduction to Statistics for Engineers	3
Prerequisite: College Algebra	
0800-0930 (094-361-001)	Lamb

ST 371 Introduction to Probability and Distribution Theory	3
Prerequisite: MA 201	
Corequisite: MA 202	
0950-1120 (094-371-001)	Wesler
0800-0930 (094-371-002)	Wesler
ST 493 Special Topics in Statistics	1-3
Prerequisite: Consent of Instructor	
Hours arranged (094-493-001)	Staff
ST 511S Experimental Statistics for Biological Sciences I	3
Prerequisite: ST 311 or Graduate standing	
1140-1310 (094-511-001)	Pollock
ST 515 Experimental Statistics for Engineers	3
Prerequisite: ST 361 or Graduate standing	
0950-1120 (094-515-001)	Gerig
ST 591 Special Problems	1-3
Hours arranged (094-591-001)	Staff
ST 691 Advanced Special Problems	1-3
Prerequisites: ST 402 or equivalent, ST 681	
Hours arranged (094-691-001)	Staff
ST 699 Research	Credits Arranged
Hours arranged (094-699-001)	Staff
SECOND SESSION	
ST 372 Introduction to Statistical Inference and Regression	3
Prerequisite: ST 371	
0950-1120 (094-372-001)	Briggs
ST 512S Experimental Statistics II	3
Prerequisite: ST 511 or equivalent	
0800-0930 (094-512-001)	Manson
ST 516 Experimental Statistics for Engineers	3
Prerequisite: ST 515	
0950-1120 (094-516-001)	Hader
ST 591 Special Problems	1-3
Hours arranged (094-591-001)	Staff
ST 691 Advanced Special Problems	1-3
Prerequisites: ST 402 or equivalent, ST 681	
Hours arranged (094-691-001)	Staff
ST 699 Research	Credits Arranged
Hours arranged (094-699-001)	Staff

Social Work

FIRST SESSION

SW 498 Special Topics in Social Work	1-6
Prerequisite: Nine hours of Social Work. Social Work students only.	
Hours arranged (086-498-001)	Reid

SECOND SESSION

SW 498 Special Topics in Social Work	1-6
Prerequisite: Nine hours of Social Work. Social Work students only.	
Hours arranged (086-498-001)	Reid

Textile Chemistry

FIRST SESSION

T 203 Introduction to Polymer Chemistry	3
Prerequisite: CH 101	
0800-0930 (095-203-001)	Staff
TC 490 Special Topics in Textile Chemistry	1-6
Hours arranged (096-490-001)	Mock
TC 591 Special Topics in Textile Science	1-4
Prerequisites: Senior or Graduate standing and Consent of Instructor	
Hours arranged (096-591-001)	Mock
TC 699 Textile Research for Textile Chemistry	Credits Arranged
Hours arranged (096-699-001)	Mock

SECOND SESSION

\$ T 301 Technology of Dyeing and Finishing	4
Prerequisite: T 203	
LR 0800-0930 (095-301-001)	Staff
LB 1340-1620 MW (095-301-101)	
T 493 Industrial Internship in Textiles	3
Prerequisite: Textile core courses (Minimum GPA 2.0); Limited to 3 hours as Free Elective; 10 weeks of 40 hours required	
Hours arranged (095-493-001)	Staff
TC 490 Special Topics in Textile Chemistry	1-6
Hours arranged (096-490-001)	Mock
TC 591 Special Topics in Textile Science	1-4
Prerequisites: Senior or Graduate standing and Consent of Instructor	
Hours arranged (096-591-001)	Mock
TC 699 Textile Research for Textile Chemistry	Credits Arranged
Hours arranged (096-699-001)	Mock

Textile Engineering and Science

FIRST SESSION

TES 490 Development Project in Textile Engineering and Science	2-3
Prerequisites: Senior standing and 2.75 GPA	
Hours arranged (097-490-001)	Gupta
TES 590 Special Projects in Textiles	2-3
Prerequisites: Senior or Graduate standing and Consent of Instructor	
Hours arranged (097-590-001)	Gupta
TES 697 Independent Study in Textiles	3
Hours arranged (097-697-001)	Gupta
TES 699 Textile Thesis or Dissertation Research	Credits Arranged
Hours arranged (097-699-001)	Gupta

SECOND SESSION

T 493 Industrial Internship in Textiles	3
Prerequisite: Textile core courses (Minimum GPA 2.0); Limited to 3 hours as Free Elective; 10 weeks of 40 hours required.	
Hours arranged (095-493-001)	Staff

TES 490 Development Project in Textile Engineering and Science	2-3
Prerequisites: Senior standing and 2.75 GPA	
Hours arranged (097-490-001)	Gupta
TES 590 Special Projects in Textiles	2-3
Prerequisites: Senior or Graduate standing and Consent of Instructor	
Hours arranged (097-590-001)	Gupta
TES 697 Independent Study in Textiles	3
Hours arranged (097-697-001)	Gupta
TES 699 Textile Thesis or Dissertation Research	Credits Arranged
Hours arranged (097-699-001)	Gupta

Textile Management and Technology

FIRST SESSION

\$ T 250 Textile Fabrics: Formation and Structure	3
Prerequisites: T 105 and MA 111	
LR 0950-1050 (095-250-001)	Donaldson
LB 1340-1620 TuTh (095-250-101)	
TMT 490 Development Project in Textile Technology	2-3
Prerequisites: Senior standing and 2.75 GPA	
Hours arranged (102-490-001)	Robinson
TMT 590 Special Projects in Textiles	2-3
Prerequisites: Senior or Graduate standing and Consent of Instructor	
Hours arranged (102-590-001)	Tucker
TMT 697 Independent Study in Textiles	3
Hours arranged (102-697-001)	Tucker
TMT 699 Textile Thesis or Dissertation Research	Credits Arranged
Hours arranged (102-699-001)	Tucker

SECOND SESSION

T 493 Industrial Internship in Textiles	3
Prerequisite: Textile core courses (Minimum GPA 2.0); Limited to 3 hours as Free Elective; 10 weeks of 40 hours required.	
Hours arranged (095-493-001)	Staff
TMT 490 Development Project in Textile Technology	2-3
Prerequisites: Senior standing and 2.75 GPA	
Hours arranged (102-490-001)	Robinson
TMT 590 Special Projects in Textiles	2-3
Prerequisites: Senior or Graduate standing and Consent of Instructor	
Hours arranged (102-590-001)	Tucker
TMT 697 Independent Study in Textiles	3
Hours arranged (102-697-001)	Tucker
TMT 699 Textile Thesis or Dissertation Research	Credits Arranged
Hours arranged (102-699-001)	Tucker

Toxicology

FIRST SESSION

TOX 590 Special Problems in Toxicology	1-3
Prerequisite: Graduate standing	
Hours arranged (088-590-001)	Staff

TOX 699 Research	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (088-699-001)	Staff

SECOND SESSION

TOX 590 Special Problems in Toxicology	1-3
Prerequisite: Graduate standing	
Hours arranged (088-590-001)	Staff

TOX 699 Research	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (088-699-001)	Staff

University Studies

FIRST SESSION

UNI 301 Science and Civilization	3
Prerequisite: Sophomore standing	
0950-1120 (089-301-001)	Hoffman
1140-1310 (089-301-002)	Hoffman

SECOND SESSION

UNI 301 Science and Civilization	3
Prerequisite: Sophomore standing	
0800-0930 (089-301-001)	Stalnaker
0950-1120 (089-301-002)	Stalnaker

Visual Design

FIRST SESSION

\$ VD 400 Intermediate Visual Design (Series)	6
Prerequisite: DF 102. May not be taken more than six times.	
0750-1300 (042-400-001)	Prygrocki

VD 595 Independent Study in Visual Design	1-3
Hours arranged (042-595-001)	Foote

VD 691 Special Topics in Visual Design	1-6
Prerequisite: Permission of Graduate advisor	
Hours arranged (042-691-001)	Foote

SECOND SESSION

VD 595 Independent Study in Visual Design	1-3
Hours arranged (042-595-001)	Staff

VD 691 Special Topics in Visual Design	1-6
Prerequisite: Permission of Graduate advisor	
Hours arranged (042-691-001)	Staff

Veterinary Medical Sciences

FIRST SESSION

VMS 590 Special Topics in Veterinary Medical Sciences	1-3
Prerequisite: Senior or Graduate standing	
Hours arranged (084-590-001)	Bentley/Berkhoff/Brown/Henrikson

VMS 690B Special Topics in Pathology	1-4
Prerequisite: DVM degree and Consent of Instructor	
Hours arranged (084-690-001)	Brown/Staff

VMS 690C Special Topics in Laboratory Pharmacology	1-3
Prerequisite: Graduate standing and Consent of Instructor	
Hours arranged (084-690-002)	Bentley/Staff
VMS 694A Seminar in Necropsy Pathology	1
Prerequisites: DVM or equivalent degree and Consent of Instructor	
Hours arranged (084-694-001)	Brown/Staff
VMS 694B Seminar in Surgical Pathology	1
Prerequisites: DVM or equivalent degree and Consent of Instructor	
Hours arranged (084-694-002)	Brown/Staff
VMS 699 Research in Veterinary Medical Sciences	1-3
Prerequisite: Graduate standing	
Hours arranged (084-699-001)	Bentley/Berkhoff/Brown/Henrikson

SECOND SESSION

VMS 590 Special Topics in Veterinary Medical Sciences	1-3
Prerequisite: Senior or Graduate standing	
Hours arranged (084-590-001)	Bentley/Berkhoff/Brown/Henrikson
VMS 690B Special Topics in Pathology	1-4
Prerequisites: DVM degree and Consent of Instructor	
Hours arranged (084-690-001)	Brown/Staff
VMS 690C Special Topics in Laboratory Pharmacology	1-3
Prerequisites: Graduate standing and Consent of Instructor	
Hours arranged (084-690-002)	Bentley/Staff
VMS 694A Seminar in Necropsy Pathology	1
Prerequisites: DVM or equivalent degree and Consent of Instructor	
Hours arranged (084-694-001)	Brown/Staff
VMS 694B Seminar in Surgical Pathology	1
Prerequisites: DVM or equivalent degree and Consent of Instructor	
Hours arranged (084-694-002)	Brown/Staff
VMS 699 Research in Veterinary Medical Sciences	1-3
Prerequisite: Graduate standing	
Hours arranged (084-699-001)	Bentley/Berkhoff/Brown/Henrikson

Wood and Paper Science

FIRST SESSION

\$ WPS 205 Wood Products Practicum	5
WST Summer Practicum	
Prerequisite: WPS 201 or WPS 202	
0800-1700 (090-205-001)	Gilmore/Kelly
May 11-June 12—Five-Week Course—Final Exam June 12	
WPS 210 Forest Products Internship	1
Prerequisite: Completion of Summer Practicum	
0800-1700 (090-210-001)	Kelly
WPS 211 Pulp and Paper Internship	1
Prerequisite: Completion of Sophomore year	
Hours arranged (090-211-001)	Hitchins
\$ WPS 491 Senior Problems in Wood and Paper Science	1-4
Prerequisite: Consent of Department	
Hours arranged (090-491-001)	Staff

WPS 591 Wood and Paper Science Problems	Credits Arranged
Prerequisite: Senior or Graduate standing	
Hours arranged (090-591-001)	Staff
WPS 693 Advanced Wood and Paper Science Problems	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (090-693-001)	Staff
WPS 699 Problems and Research	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (090-699-001)	Staff
SECOND SESSION	
\$ WPS 491 Senior Problems in Wood and Paper Science	1-4
Prerequisite: Consent of Department	
Hours arranged (090-491-001)	Staff
WPS 591 Wood and Paper Science Problems	Credits Arranged
Prerequisite: Senior or Graduate standing	
Hours arranged (090-591-001)	Staff
WPS 693 Advanced Wood and Paper Science Problems	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (090-693-001)	Staff
WPS 699 Problems and Research	Credits Arranged
Prerequisite: Graduate standing	
Hours arranged (090-699-001)	Staff

Zoology

FIRST SESSION

\$ BS 100 General Biology	4
(See Biological Sciences)	
\$ ZO 201 General Zoology	4
Prerequisite: BS 100 or BS 105	
LR 0800-0930 (099-201-001)	Allen
LB 1340-1750 MW (099-201-101)	
LB 1340-1750 TuTh (099-201-102)	
ZO (FW) 221 Conservation of Natural Resources	3
(See Fisheries and Wildlife)	
ZO (BO) 360 Introduction to Ecology	3
(See Botany)	
\$ ZO (BO) 365 Ecology Laboratory	1
(See Botany)	
ZO 590 Special Studies	Credits Arranged
Prerequisites: Twelve semester credits in Zoology and Consent of Instructor	
Hours arranged (099-590-001)	Miller
ZO 699 Research in Zoology	Credits Arranged
Prerequisites: Twelve semester credits in Zoology and Consent of Instructor	
Hours arranged (099-699-001)	Miller

SECOND SESSION

\$ ZO 303 Vertebrate Zoology

4

Prerequisite: BS 100 or BO 200

LR 0950-1120 (099-303-001)

Zielinski

LB 1340-1750 MW (099-303-101)

LB 1340-1750 TuTh (099-303-102)

ZO 421E Principles of Physiology

3

Prerequisites: CH 223, PY 212, ZO 201 or ZO 303

1910-2200 MTuWTh (099-421-001)

Staff

ZO 590 Special Studies

Credits Arranged

Prerequisites: Twelve semester credits in Zoology and Consent of Instructor

Hours arranged (099-590-001)

Miller

ZO 699 Research in Zoology

Credits Arranged

Prerequisites: Twelve semester credits in Zoology and Consent of Instructor

Hours arranged (099-699-001)

Miller

LATE AFTERNOON AND EVENING CLASSES

FIRST SESSION

ANTHROPOLOGY

ANT 252E Cultural Anthropology

3

1745-1930 MTuWTh (012-252-003)

Staff

EDUCATION

ED 475 Methods of Teaching Science

3

Prerequisites: ED 203, ED 344, PSY 304

Taught concurrently with ED 477 and ED 495A

1600-1900 TuTh (028-475-001)

Wheatley

May 19-June 11

and

0900-1200 MTuWThF

June 16-June 25

ED 477 Instructional Materials in Science

2

Prerequisites: ED 203, ED 344, PSY 304

Corequisites: ED 475, ED 476, Senior standing; admission to teacher education

Taught concurrently with ED 475 and ED 495A

1600-1900 TuTh (028-477-001)

Wheatley

May 19-June 11

and

0900-1200 MTuWThF

June 16-June 25

ED 495A Senior Seminar in Mathematics/Science Education

1

Prerequisites: Advanced undergraduate and consent of Department

Taught concurrently with ED 475 and ED 477

1600-1900 TuTh (028-495-001)

Wheatley

May 19-June 11

and

0900-1200 MTuWThF

June 16-June 25

ED 508 Education of Severely Handicapped

3

Prerequisite: ED 531 or ED 574 or Consent of Instructor

1600-1930 TuTh (028-508-001)

Griffin

ED 526 Teaching in College 1530-1700 (028-526-001)	3 Anderson
ED 530E Theories and Techniques of Counseling Prerequisite: Six hours of ED or PSY Corequisite: ED 520 or equivalent 1600-1930 TuTh (028-530-001)	3 Gerler
ED 533E Group Counseling Prerequisite: ED 530 1600-1930 MW (028-533-001)	3 Gerler
ED 570 Foundations of Mathematics Education Prerequisite: ED 471 or equivalent 1800-2100 MW (028-570-001)	3 W. Waters
ED 596A Topical Problems in Adult and Community College Education: Death and Dying—A Lifespan Issue Prerequisite: Graduate standing or PBS status 1600-1930 MW (028-596-002)	3 Glass
ED 596B Topical Problems in Adult and Community College Education: Working in Groups in Adult Education Prerequisite: Graduate standing or PBS status 1600-1930 TuTh (028-596-003)	3 Glass
ED 625 Cross Cultural Counseling Prerequisites: ED 530; Nine semester hours of graduate level Education 1600-1930 MW (028-625-001)	3 Locke

FOREIGN LANGUAGES AND LITERATURES

FRENCH

\$ FLF 101E Elementary French I 1745-1930 MTuWTh (064-101-004)	3 Tronel
--	-------------

SPANISH

\$ FLS 101E Elementary Spanish I 1545-1730 MTuWTh (068-101-004)	3 Alonso
\$ FLS 201E Intermediate Spanish I Prerequisite: FLS 102 or FLS 105 1745-1930 MTuWTh (068-201-003)	3 Alonso

POLITICAL SCIENCE AND PUBLIC ADMINISTRATION

PUBLIC ADMINISTRATION

PA 513E Financial Management in the Public Sector Prerequisite: Graduate standing or PBS status 1630-1830 MTuWTh (034-513-001)	3 Coe
---	----------

PHYSICAL EDUCATION

PE 221E Intermediate Swimming Prerequisite: PE 113 or equivalent skill 1945-2045 MTuWTh (075-221-002)	1 Roberts
PE 256E Racquetball 1745-1845 MTuWTh (075-256-004)	1 Roberts

SOCIOLOGY

SOC 202E Principles of Sociology

1745-1930 MTuWTh (092-202-006)

3
Staff

SOC 204E Sociology of Family

1745-1930 MTuWTh (092-204-005)

1945-2130 MTuWTh (092-204-006)

3
Risman
Risman

SOC 301E Human Behavior

Prerequisite: SOC 202 or PSY 200

1745-1930 MTuWTh (092-301-003)

3
Staff

SECOND SESSION

ANTHROPOLOGY

ANT 252E Cultural Anthropology

1745-1930 MTuWTh (012-252-004)

3
Staff

EDUCATION

ED 597C Special Problems in Education: Internal and External Consulting

Prerequisite: Graduate standing or PBS status

1700-2000 TuWTh (028-597-004)

3
Dillon

ED 597D Special Problems in Education: Medical Law & Ethics

Prerequisite: Graduate standing or PBS status

1700-2100 TuTh (028-597-005)

3
Patterson

FOREIGN LANGUAGES AND LITERATURES

FRENCH

\$ FLF 102E Elementary French II

Prerequisite: FLF 101

1745-1930 MTuWTh (064-102-003)

3
Ahl

POLITICAL SCIENCE AND PUBLIC ADMINISTRATION

PUBLIC ADMINISTRATION

***PA 516E Public Policy Analysis**

Prerequisite: Advanced undergraduate standing including 12 hours of political science, Graduate standing or PBS status

1900-2200 MW (034-516-001)

3
Swiss

*There will be additional class meetings on July 18 and August 5. The final examination will be on August 7.

PA 613E Government and Planning

Prerequisites: Graduate standing or Management Development Certificate Program and six semester hours of 500-level course work

1900-2200 MTuTh (034-613-001)

3
Staff

****PA 614E Management Systems**

Prerequisites: Graduate standing or Management Development Certificate Program and six semester hours of 500-level course work

1900-2200 TuTh (034-614-001)

3
Swiss

**There will be additional class meetings on July 18, August 4 and August 6. The final examination will be on August 7.

PHYSICAL EDUCATION

PE 237E Weight Training	1
1945-2045 MTuWTh (075-237-003)	Bechtolt
PE 256E Racquetball	1
1745-1845 MTuWTh (075-256-002)	Bechtolt

SOCIOLOGY

SOC 202E Principles of Sociology	3
1745-1930 MTuWTh (092-202-006)	Staff
SOC 204E Sociology of Family	3
1745-1930 MTuWTh (092-204-006)	Staff
1945-2130 MTuWTh (092-204-007)	Staff
SOC 541 Social Systems and Planned Change	3
Prerequisite: Three hours SOC	
1745-1930 MTuWTh (092-541-001)	Marsh

ZOOLOGY

ZO 421E Principles of Physiology	3
Prerequisites: CH 223, PY 212, ZO 201 or ZO 303	
1910-2200 MTuWTh (099-421-001)	Staff

TEN-WEEK SESSION

ACCOUNTING

ACC 210E Accounting I—Concepts of Financial Reporting	3
1745-1930 TuTh (004-210-051)	Staff
ACC 220E Accounting II—An Introduction to Managerial Accounting	3
Prerequisite: ACC 210	
1945-2130 TuTh (004-220-051)	Staff

COMPUTER SCIENCE

\$ CSC 101E Introduction to Programming	3
Prerequisite: MA 111	
LR 1745-1915 MW (023-101-051)	Balla
LB 1945-2130 MW (023-101-151) (023-101-152) (023-101-153) (023-101-154) (023-101-155) (023-101-156)	

\$ CSC 102E Programming Concepts	3
Prerequisite: CSC 101	
1745-1930 MW (023-102-052)	Brain

CSC 200E Introduction to Computers and Their Uses	3
A student who has previously taken CSC 101 or CSC 111 may not receive credit for this course.	
1615-1730 TuTh (023-200-052)	Lindhome/Curtis
NOTE: Students registering for CSC 200E must also register for CSC 200Y.	

\$ CSC 200Y Introduction to Computers Laboratory	0
1745-2045 Tu (023-200-161)	
1745-2045 W (023-200-162)	
1745-2045 Th (023-200-163)	

\$ CSC 201E Basic Computer Organization and Assembly Language	3
Prerequisite: CSC 101 or CSC 111	
1745-1930 TuTh (023-201-052)	E. Hodges

\$ CSC 202E Concepts and Facilities of Operating Systems	3
Prerequisite: CSC 201 or equivalent	
1945-2130 TuTh (023-202-051)	L. Hodges
\$ CSC 252E Principles of Programming—COBOL	2
Prerequisite: CSC 101	
1945-2115 MW (023-252-051)	Secrest/Turyrn
\$ CSC 311E Data Structures	3
Prerequisites: CSC 102 and CSC 201	
1745-1930 TuTh (023-311-052)	Staff
CSC 421E Introduction to Management Information Systems	3
Prerequisite: CSC 311	
1745-1930 MW (023-421-051)	Schur
\$ CSC 431E File Organization and Processing	3
Prerequisite: CSC 311	
1545-1730 TuTh (023-431-051)	Ruchte
\$ CSC 461E Computer Graphics	3
Prerequisites: MA 202 or MA 212; CSC 101 or CSC 111	
1745-1930 TuTh (023-461-052)	L. Hodges
COMPUTER STUDIES	
\$ CSE 452E Assembly Language and Basic Computer Organization	1
Prerequisites: Higher level programming language and Consent of Instructor	
No degree credit for Computer Science or Computer Studies majors or anyone having received credit for CSC 201 or CSC 256.	
1745-1930 TuTh (009-452-052)	E. Hodges
\$ CSC 453E Data Structures	1
Prerequisites: Higher level programming language and Consent of Instructor	
Corequisite: CSE 452 or equivalent	
No degree credit for Computer Science or Computer Studies majors or anyone having received credit for CSC 311.	
1745-1930 TuTh (009-453-052)	Staff
ECONOMICS AND BUSINESS	
EB 307E Business Law I	3
Prerequisite: EB 201 or EB 212	
Credit for both EB 306 and EB 307 is not allowed.	
1745-1930 MW (027-307-051)	Staff
EB 501E Price Theory	3
Prerequisites: MA 113 and EB 301	
1745-1930 MW (027-501-051)	Palmquist
EB 502E Income and Employment Theory	3
Prerequisites: MA 113, EB 301 and EB 302, EB (ST) 350	
1745-1930 TuTh (027-502-051)	D. Fisher
EB 625E Long Range Planning in Business and Industry	3
Prerequisite: EB 501	
1745-1930 MW (027-625-051)	Newmark
ENGLISH	
FRESHMAN ENGLISH	
ENG 111E Composition and Rhetoric	3
General University requirement.	
Successful completion of ENG 111 requires a grade of C or better.	
1745-1930 MW (036-111-051)	Staff

ENG 112E Composition and Reading	3
General University requirement.	
Prerequisite: A grade of C or better in ENG 111	
1945-2130 MW (036-112-051)	Staff
WRITING AND LANGUAGE	
<i>The prerequisite for all courses in writing and language at the 200-level and above is the completion of ENG 111 and ENG 112.</i>	
ENG 321E The Communication of Technical Information	3
Prerequisite: Junior standing	
1745-1930 TuTh (036-321-051)	Staff
1945-2130 TuTh (036-321-052)	Staff
LITERATURE	
<i>The prerequisite for all literature courses is the completion of ENG 111 and ENG 112.</i>	
ENG 208E Studies in Fiction	3
The courses ENG 205, ENG 206, ENG 207, and ENG 208 are designed for students not enrolled in Humanities and Social Sciences.	
1745-1930 MW (036-208-051)	Staff
1945-2130 MW (036-208-052)	Staff
ENG 262E English Literature II	3
1745-1930 MW (036-262-051)	Staff
ENG 265E American Literature I	3
1745-1930 TuTh (036-265-051)	Staff
ENG 266E American Literature II	3
1945-2130 TuTh (036-266-051)	Staff
MATHEMATICS	
MA 111E Algebra and Trigonometry	4
Credit is not allowed for both MA 100 and MA 111. For students in Engineering, Physical and Mathematical Sciences, Design, Biological and Agricultural Engineering (Science program), Biological Sciences (all options), and Mathematics Education, Science Education credit in MA 111 does not count toward graduation.	
1915-2150 MW (054-111-051) (054-111-052)	Staff
MA 113E Elements of Calculus	4
Prerequisite: MA 111 or equivalent completed in high school	
Credit is not allowed in more than one of MA 102, MA 112, MA 113. MA 113 may not be substituted for MA 102 as a curricular requirement.	
1915-2150 TuTh (054-113-051)	Staff
MA 114E Introduction to Finite Mathematics with Applications	3
Prerequisite: MA 111 or equivalent completed in high school	
1945-2130 MW (054-114-051)	Staff
POLITICAL SCIENCE AND PUBLIC ADMINISTRATION	
POLITICAL SCIENCE	
PS 202E State and Local Government	3
1730-1930 MTh (080-202-051)	McClain



SUMMER SESSIONS FACULTY

A

Hiller S. Abernathy, Ph.D., Visiting Assistant Professor, Curriculum and Instruction
 Charlie Frank Abrams, Jr., Ph.D., Professor, Biological and Agricultural Engineering
 D. A. Adams, Ph.D., Associate Professor, Forestry
 Elsayed M. Afify, Ph.D., Professor, Mechanical and Aerospace Engineering
 Kelly Ahl, M.A., Visiting Lecturer, Foreign Languages and Literatures
 James A. Alchediak, M.A., Lecturer, Speech-Communication
 Ruth Alder, Ph.D., Associate Professor, Foreign Languages and Literatures
 Claudia Allen, J.D., Lecturer, Economics and Business
 Susan Lieberman Allen, M.S., Visiting Instructor, Zoology
 William D. Allen, M.S., Visiting Instructor, Electrical and Computer Engineering
 Sylvia Alonso, Ph.D., Associate Professor, Foreign Languages and Literatures
 Norman D. Anderson, Ph.D., Professor, Mathematics and Science Education
 Ruth D. Anderson, Ph.D., Associate Professor, Speech-Communication
 Louise M. Antony, Ph.D., Assistant Professor, Philosophy and Religion
 Frank B. Armstrong, Ph.D., Professor, Biochemistry
 John F. Arnold, Ph.D., Associate Professor, Curriculum and Instruction
 Aram Attarian, M.A., Lecturer, Physical Education
 Lyn C. Aubrecht, Ph.D., Adjunct Assistant Professor, Curriculum and Instruction
 David Daniel Auerbach, Ph.D., Assistant Professor, Philosophy and Religion
 Leonard William Aurand, Ph.D., Professor, Food Science
 David Franklin Austin, Ph.D., Assistant Professor, Philosophy and Religion

B

Lynne E. Baker-Ward, Ph.D., Assistant Professor, Psychology
 David Ball, Ph.D., Associate Professor, Economics and Business
 Hershell Ray Ball, Jr., Ph.D., Professor, Food Science
 Gwen Louise Barclay, M.A., Lecturer, English
 James C. Barker, Ph.D., Extension Professor, Biological and Agricultural Engineering
 Linda Kay Barlow, Ph.D., Visiting Lecturer, English
 George O. Batton, B.S., Lecturer, Mechanical and Aerospace Engineering
 Gerald Robert Baughman, Ph.D., Associate Professor, Biological and Agricultural Engineering
 David Baumer, Ph.D., Associate Professor, Economics and Business
 R. N. Bechtolt, M.S., Lecturer, Physical Education
 Burton F. Beers, Ph.D., Professor, History
 William H. Beezley, Ph.D., Professor, History
 Ray Braman Benson, Ph.D., Professor, Materials Engineering
 Henry A. Bent, Ph.D., Professor, Chemistry
 Peter J. Bentley, Ph.D., Professor, Veterinary Sciences
 Herman J. Berkhoff, Ph.D., Professor, Veterinary Sciences
 Leonidas Judd Betts, Ed.D., Associate Professor, English
 William L. Bingham, Ph.D., Associate Professor, Civil Engineering
 Paul Edward Bishop, Ph.D., Associate Professor, Microbiology
 Milton Clay Bliss, M.A., Assistant Director, Music
 George B. Blum, Jr., MAE, Professor, Biological and Agricultural Engineering
 Michael A. Boles, Ph.D., Associate Professor, Mechanical and Aerospace Engineering
 Charles B. Boss, Ph.D., Associate Professor, Chemistry
 Robert W. Bottcher, Ph.D., Assistant Professor, Biological and Agricultural Engineering
 Risa Dworsky Botvinick, M.A., Visiting Lecturer, English
 Edmond F. Bowden, Ph.D., Assistant Professor, Chemistry
 Henry Dittimus Bowen, Ph.D., Professor, Biological and Agricultural Engineering
 Lawrence H. Bowen, Ph.D., Professor, Chemistry
 Leon C. Boyd, Ph.D., Assistant Professor, Food Science
 Albert S. Boyers, M.S., Lecturer, Mechanical and Aerospace Engineering
 J. R. Bradley, Jr., Ph.D., Professor, Entomology
 R. R. Braham, Ph.D., Assistant Professor, Forestry
 Gweneth R. Briggs, M.S., Visiting Instructor, Statistics
 Robert C. Brisson, Ph.D., Associate Professor, Sociology and Anthropology
 Eugene Brooks, Ph.D., Lecturer, Economics and Business
 Joel V. Brothers, M.A.T., Assistant Professor, Physical Education
 James S. Brown, MSW, Assistant Professor, Sociology and Anthropology
 John Gregory Brown, M.A., Lecturer, English
 Talmage T. Brown, Jr., Ph.D., Professor, Veterinary Sciences
 Thomas H. Brown, M.S., Visiting Instructor, Mechanical and Aerospace Engineering
 William S. Bryan, MWPS, Research Assistant and Teaching Technician, Wood and Paper Science
 Sally B. Buckner, Ph.D., Visiting Assistant Professor, Curriculum and Instruction
 Rita Marie Buhr, M.A., Lecturer, English
 Carl L. Bumgardner, Ph.D., Professor, Chemistry
 Kathryn Ann Burak, M.F.A., Lecturer, English
 Ralph Byers, Ph.D., Assistant Professor, Mathematics

C

Patricia C. Caple, Ph.D., Associate Professor, Speech-Communication
 L. Raymond Camp, Ph.D., Associate Professor, Speech-Communication
 Dale Campbell, Ph.D., Assistant Professor, Adult and Community College Education
 Roy Eugene Carawan, Ph.D., Associate Professor, Food Science
 Halbert H. Carmichael, Ph.D., Professor, Chemistry
 Daniel Edward Carroll, Ph.D., Professor, Food Science
 Michael Purcell Carter, Ph.D., Assistant Professor, English
 George Lewis Catignani, Ph.D., Associate Professor, Food Science
 Thomas C. Caves, Ph.D., Associate Professor, Chemistry
 A. C. Chao, Ph.D., Associate Professor, Civil Engineering
 Shanna M. Chastain, M.A., Assistant Professor, Physical Education
 Richard Edward Chandler, Ph.D., Professor, Mathematics
 Harvey Johnson Charlton, Ph.D., Assistant Professor, Mathematics
 A. A. Cheek, M.S., Assistant Professor, Physical Education
 Rey T. Chern, Ph.D., Assistant Professor, Chemical Engineering
 Moody Chu, Ph.D., Assistant Professor, Mathematics
 Lung Ock Chung, Ph.D., Associate Professor, Mathematics
 Edward Depriest Clark, Ph.D., Associate Professor, English
 G. C. Cobb, Ph.D., Associate Professor, Physics
 Paul Rodman Cockshutt, A.B., Lecturer, English
 Charles K. Coe, D.P.A., Assistant Professor, Political Science and Public Administration
 Janice C. Coffey, Ph.D., Visiting Associate Professor, Biological Sciences
 A. W. Cooper, Ph.D., Professor and Head, Forestry
 Nelvin E. Cooper, M.E., Associate Professor, Physical Education
 Alonzo F. Coots, Ph.D., Associate Professor, Chemistry
 John C. Cornwell, Ph.D., Associate Professor, Animal Science
 Dario Cortes, Ph.D., Associate Professor, Foreign Languages and Literatures
 David Harrison Covington, Ph.D., Assistant Professor, English
 James E. Crisp, Ph.D., Assistant Professor, History
 Joseph W. Cunningham, Ph.D., Professor, Psychology
 Susan J. Curtis, B.S., Visiting Lecturer, Computer Science

D

Mark Anthony Daeschel, Ph.D., Assistant Professor, Food Science
 John Michael Anthony Danby, Ph.D., Professor, Mathematics
 C. B. Davey, Ph.D., Carl Alwin Schenck Professor, Forestry and Soil Science
 Edward W. Davis, Ph.D., Associate Professor, Computer Science
 K. L. Davis, B.S., Lecturer, Physical Education
 W. R. Davis, Ph.D., Professor, Physics
 Harold Leroy Davison, M.A.T., Lecturer, Mathematics
 M. Keith DeArmond, Ph.D., Professor, Chemistry
 Daniel A. DeJoy, Ph.D., Assistant Professor, Speech-Communication
 L. Richard Della Fave, Ph.D., Professor, Sociology and Anthropology
 Henry Evans Dickerson, M.A., Lecturer, English
 Linda S. Dillon, Ph.D., Associate Professor, Occupational Education
 Walter Jerome Dobrogosz, Ph.D., Professor, Microbiology
 W. O. Doggett, Ph.D., Professor, Physics
 R. Alan Donaldson, Associateship in Textile Design, Associate Professor, Textile Management and Technology
 Louis Bynum Driggers, M.S., Extension Professor, Biological and Agricultural Engineering
 Jack Davis Durant, Ph.D., Professor, English

E

Yukiko Ebisuzaki, Ph.D., Associate Professor, Chemistry
 John A. Edwards, Ph.D., Professor, Mechanical and Aerospace Engineering
 Malik E. Elbuluk, D.Sc., Visiting Lecturer, Electrical and Computer Engineering
 Gerald Hugh Elkan, Ph.D., Professor, Microbiology
 Risa S. Ellovich, Ph.D., Assistant Professor, Sociology and Anthropology
 John F. Ely, Ph.D., Professor, Civil Engineering
 Donald A. Emery, Ph.D., Professor, Crop Science
 William P. Erchul, Ph.D., Assistant Professor, Psychology
 T. W. Evans, M.S., Assistant Professor, Physical Education

F

Abdel Aziz Fahmy, Ph.D., Professor, Materials Engineering
 Lynette Addene Fairman, M.A., Lecturer, English
 M. H. Farrier, Ph.D., Professor, Forestry and Entomology
 Amassa Fautleroy, Ph.D., Professor, Mathematics
 Karrie Finkel, M.S., Assistant Professor, Design
 Doug Fisher, Ph.D., Professor, Economics and Business
 Mark Fisher, M.B.A., Lecturer, Economics and Business

Henry Pridgen Fleming, Ph.D., Professor, Food Science
 James L. Flowers, Ph.D., Assistant Professor, Occupational Education
 Edward Alan Foegeding, Ph.D., Assistant Professor, Food Science
 Peggy Matthews Foegeding, Ph.D., Assistant Professor, Food Science
 E. C. Franklin, Ph.D., Professor, Forestry
 William G. Franklin, Ph.D., Professor, Speech-Communication
 Katherine Frazier, Ph.D., Associate Professor, Economics and Business
 D. J. Frederick, Ph.D., Professor, Forestry
 Leon D. Freedman, Ph.D., Professor, Chemistry
 Ronald Owen Fulp, Ph.D., Professor, Mathematics
 Edward T. Funkhouser, Ph.D., Assistant Professor, Speech-Communication

G

Bertram H. Garcia, Ph.D., Professor Emeritus, Mechanical and Aerospace Engineering
 W. E. Gardner, B.S., Extension Specialist, Forestry
 Dennis Evo Garoutte, Ph.D., Assistant Professor, Mathematics
 Thomas M. Gerig, Ph.D., Professor, Statistics
 E. R. Gerler, Jr., Ed.D., Associate Professor, Counselor Education
 Eitan Gerstner, Ph.D., Assistant Professor, Economics and Business
 Forrest W. Getzen, Ph.D., Professor, Chemistry
 John H. Gilbert, Ph.D., Associate Professor and Assistant Head, Political Science and Public Administration
 Robert C. Gilmore, M.W.Tech., Associate Professor, Wood and Paper Science
 Jennifer Moreland Ginn, M.A., Lecturer, English
 Joseph Conrad Glass, Ed.D., Professor, Adult and Community College Education
 Gabriel Gonzalez, Ph.D., Associate Professor, Foreign Languages and Literatures
 Fred L. Gould, Ph.D., Associate Professor, Entomology
 L. F. Grand, Ph.D., Professor, Plant Pathology and Forestry
 Julia Marianne Green, M.A.T., Visiting Lecturer, Foreign Languages and Literatures
 Anne Young Gregory, M.A., Lecturer, English
 J. D. Gregory, Ph.D., Associate Professor, Forestry
 Max Edwin Gregory, Ph.D., Extension Professor, Food Science
 Harold C. Griffin, Ph.D., Assistant Professor, Curriculum and Instruction
 Larry Grimes, Ph.D., Visiting Assistant Professor, Biological Sciences
 Georges Guirguis, Ph.D., Assistant Professor, Mathematics
 Gaynell C. Gull, M.Ed., Lecturer, Occupational Education
 A. K. Gupta, Ph.D., Professor, Civil Engineering
 Robert G. Gwyn, M.A.T., Assistant Professor, Physical Education

H

Robert J. Hader, Ph.D., Professor Emeritus, Statistics
 W. L. Hafley, Ph.D., Professor, Forestry and Statistics
 Francis J. Hale, Sc.D., Professor, Mechanical and Aerospace Engineering
 G. L. Hall, Ph.D., Professor, Physics
 Donald Dale Hamann, Ph.D., Professor, Food Science
 Robert Michael Hamfberger, Ph.D., Associate Professor, Philosophy and Religion
 R. A. Hamilton, M.F., Extension Forest Resource Specialist, Forestry
 Frank Milton Hammond, Ed.D., Assistant Director, Music
 Thomas N. Hammond, Ph.D., Associate Professor, Foreign Languages and Literatures
 Gail A. Hankins, Ph.D., Assistant Professor, Speech-Communication
 Arthur Paul Hansen, Ph.D., Associate Professor, Food Science
 Reza Haque, Ph.D., Visiting Assistant Professor, Physics
 Marianna Dail Hardison, M.A., Lecturer, English
 Antony Howard Harrison, Ph.D., Associate Professor, English
 Robert Eduard Hartwig, Ph.D., Professor, Mathematics
 A. E. Hassan, Ph.D., Professor, Forestry and Wood and Paper Science
 Hosni Moustafa Hassan, Ph.D., Professor, Food Science
 W. J. Haynie, Ph.D., Assistant Professor, Occupational Education
 Charles K. Henrikson, Ph.D., Assistant Professor, Veterinary Sciences
 Forrest C. Hentz, Jr., Ph.D., Professor, Chemistry
 James Hess, Ph.D., Associate Professor, Economics and Business
 Marvin Thomas Hester, Ph.D., Professor, English
 Gary D. Hill, Ph.D., Assistant Professor, Sociology and Anthropology
 Wandra P. Hill, M.A., Coordinator, Cooperative Education
 Joseph P. Hobbs, Ph.D., Professor, History
 Elizabeth W. Hodges, M.A., Visiting Lecturer, Computer Science
 Larry F. Hodges, M.S., Visiting Instructor, Computer Science
 Thomas H. Hodgson, Ph.D., Professor, Mechanical and Aerospace Engineering
 Robert L. Hoffman, Ph.D., Associate Professor, University Studies and Botany
 D. L. Holley, Ph.D., Professor, Forestry
 Linda Tarte Holley, Ph.D., Associate Professor, English
 William Thomas Holloman, III, M.S., Senior Coordinator, Cooperative Education Program, Provost's Office
 Abraham Holtzman, Ph.D., Professor, Political Science and Public Administration
 Willard E. Hooker, M.A., Associate Professor, Horticultural Science

Carol Leigh Hoppe, M.A., Lecturer, English
Grace Shaw Horne, M.A., Lecturer, English
H. Robert Horton, Ph.D., Professor, Biochemistry
Darrell E. Hoy, Ph.D., Visiting Assistant Professor, Mechanical and Aerospace Engineering
John Huggard, J.D., Lecturer, Economics and Business
Z. Z Hugus, Jr., Ph.D., Professor, Chemistry
Frank James Humenik, Ph.D., Professor and Acting Head, Biological and Agricultural Engineering
Ervin Grigg Humphries, Ph.D., Professor, Biological and Agricultural Engineering
Keith Lee Huneycutt, M.A., Lecturer, English
Elvan Edward Hutchison, M.S., Associate Professor, Textile Management and Technology
Theodore M. Hyman, Ph.D., Assistant Professor, Sociology and Anthropology

J

A. W. Jenkins, Ph.D., Professor, Physics
L. G. Jarvis, M.F., Associate Professor, Forestry
Elisabeth Jezierski, M.A., Lecturer, Foreign Languages and Literatures
C. E. Johnson, Ph.D., Professor, Physics
Robert Edward Johnston, Ph.D., Associate Professor, Microbiology
C. P. Jones, Ph.D., Professor, Economics and Business
Louis A. Jones, Ph.D., Professor, Chemistry
Victor Alan Jones, Ph.D., Professor and Teaching Coordinator, Food Science
Thomas W. Joyce, Ph.D., Professor, Wood and Paper Science

K

Joseph S. Kahn, Ph.D., Professor, Biochemistry
Carl Timothy Kelley, Ph.D., Associate Professor, Mathematics
R. C. Kellison, Ph.D., Professor, Forestry
John Kelly, Ph.D., Professor, Foreign Languages and Literatures
Myron W. Kelly, Ph.D., Professor, Wood and Paper Science
Sanford H. Kessler, Ph.D., Associate Professor, Political Science and Public Administration
S. Khorram, Ph.D., Professor, Forestry
Laura Whitesel Killion, M.A., Lecturer, English
Doris E. King, Ph.D., Professor, History
Sondra L. Kirsch, M.S., Associate Professor, Recreation Resources Administration
Todd Robert Klaenhammer, Ph.D., Associate Professor, Food Science
W. L. Klarman, Ph.D., Professor and Head, Plant Pathology
Charles R. Knoeber, Ph.D., Professor, Economics and Business
James A. Knopp, Ph.D., Associate Professor, Biochemistry
Kwangil Koh, Ph.D., Professor, Mathematics
J. R. Kolb, Ph.D., Professor, Mathematics and Science Education
Jonathan Charles Kramer, B.S., Assistant Director, Music
Paul Kupiec, Ph.D., Assistant Professor, Economics and Business
Pamela P. Kuzminski, Ph.D., Visiting Assistant Professor, Curriculum and Instruction

L

J. G. Laarman, Ph.D., Associate Professor, Forestry
Thomas Joseph Lada, Ph.D., Associate Professor, Mathematics
R. A. Lancia, Ph.D., Associate Professor, Forestry
Bryce H. Lane, M.S., Lecturer, Horticultural Science
Tyre Calvin Lanier, Ph.D., Associate Professor, Food Science
Duane K. Larick, Ph.D., Assistant Professor, Food Science
Doris Lucas Laryea, Ph.D., Associate Professor, English
Charles A. Lassiter, Ph.D., Professor and Head, Animal Science
James W. Leach, Ph.D., Associate Professor, Mechanical and Aerospace Engineering
Terri Thornberg Leith, M.A., Lecturer, English
Pennington LeNoir, M.A., Lecturer, Mathematics
Rebecca Leonard, Ph.D., Assistant Professor, Speech-Communication
Harold Dresner Levin, Ph.D., Associate Professor, Philosophy and Religion
Joseph Levine, Ph.D., Assistant Professor, Philosophy and Religion
Samuel G. Levine, Ph.D., Professor, Chemistry
Stanley Liebowitz, Ph.D., Associate Professor, Economics and Business
Cheryl R. Lindhome, M.S., Visiting Instructor, Computer Science
David R. Lineback, Ph.D., Professor and Department Head, Food Science
Ken Lioret, M.A., Visiting Lecturer, Foreign Languages and Literatures
D. C. Locke, Ed.D., Associate Professor, Counselor Education
G. Gilbert Long, Ph.D., Professor, Chemistry
Larry W. Long, Ph.D., Associate Professor, Speech-Communication
Ian S. Longmuir, M.B., B. Chir., Professor, Biochemistry
Carolyn S. Love, Ph.D., Assistant Professor, Recreation Resources Administration
Geraldine Hobson Luginbuhl, Ph.D., Associate Professor, Microbiology
Jiang Luh, Ph.D., Professor, Mathematics
Charles F. Lytle, Ph.D., Professor, Zoology and Teaching Coordinator, Biological Sciences

M

John Munro Mackenzie, Ph.D., Associate Professor, Microbiology
 Clarence J. Maday, Ph.D., Associate Professor, Mechanical and Aerospace Engineering
 Linda S. Malami, M.Ed., Senior Coordinator, Cooperative Education
 Coro Malaxecheverria, Ph.D., Assistant Professor, Foreign Languages and Literatures
 Arlene Malinowski, Ph.D., Associate Professor, Foreign Languages and Literatures
 B. Malspied, Ed.D., Assistant Professor, Occupational Education
 Allison R. Manson, Ph.D., Professor, Statistics
 Steve Margolis, Ph.D., Associate Professor, Economics and Business
 C. Paul Marsh, M.S., Professor, Sociology and Anthropology
 John C. Marshall, Ed.D., Associate Professor, Educational Leadership and Program Evaluation
 David B. Marsland, Ph.D., Professor, Chemical Engineering
 E. Stuart Maxwell, Ph.D., Assistant Professor, Biochemistry
 Jackson M. McClain, Ph.D., Associate Professor, Political Science and Public Administration
 David W. McClintock, Ph.D., Visiting Associate Professor, Political Science and Public Administration
 William Fred McClure, Ph.D., Professor, Biological and Agricultural Engineering
 Marilyn Sugg McCollum, M.S., Lecturer, Mathematics
 Patrick H. McDonald, Ph.D., Harrelson Professor, Civil Engineering
 Roger Floyd McFeeters, Ph.D., Professor, Food Science
 W. H. McKenzie, Ph.D., Professor, Genetics
 Thoyd Melton, Ph.D., Associate Professor, Microbiology
 Robert Stephen Metzger, Ph.D., Associate Professor, Philosophy and Religion
 Carl Dean Meyer, Jr., Ph.D., Professor, Mathematics
 Catherine Milani, M.A., Visiting Lecturer, Foreign Languages and Literatures
 Eric Scott Miller, Ph.D., Assistant Professor, Microbiology
 William L. Miller, Ph.D., Professor, Biochemistry
 Kailash Misra, Ph.D., Assistant Professor, Mathematics
 Subhas C. Mohapatra, Ph.D., Senior Researcher, Biological and Agricultural Engineering
 Catherine Elizabeth Moore, Ph.D., Associate Professor, English
 Robert Bruce Mullin, Ph.D., Assistant Professor, Philosophy and Religion
 Harry E. Munn, Ph.D., Associate Professor, Speech-Communication

N

Herbert H. Neunzig, Ph.D., Professor, Entomology
 Gordon D. Newby, Ph.D., Associate Professor, History
 Craig Newmark, Ph.D., Assistant Professor, Economics and Business
 Paul Adrian Nickel, Ph.D., Professor, Mathematics
 Gifford S. Nickerson, Ph.D., Associate Professor, Sociology and Anthropology
 Michael Novak, Ph.D., Visiting Assistant Professor, History

O

I. F. Ormond, III, B.A., Lecturer, Physical Education
 Jon Frederick Ort, Ph.D., Associate Professor, Poultry Science
 H. L. Owen, B.S., Visiting Lecturer, Physics

P

Ray Palmquist, Ph.D., Associate Professor, Economics and Business
 Chia-Ven Pao, Ph.D., Professor, Mathematics
 J. Y. Park, Ph.D., Professor, Physics
 Charles A. Parker, Ph.D., Professor, Speech-Communication
 G. W. Parker, Ph.D., Associate Professor, Physics
 Leo W. Parks, Ph.D., Professor and Head, Microbiology
 Mary Paschal, Ph.D., Professor, Foreign Languages and Literatures
 Ruth M. Patterson, Ph.D., Assistant Professor, Occupational Education
 Sue P. Patterson, M.Ed., Lecturer, Occupational Education
 Philip M. Pavlik, A.B., Visiting Lecturer, Political Science and Public Administration
 R. L. Peace, J.D., Lecturer, Economics and Business
 R. J. Peeler, Ph.D., Professor, Economics and Business
 Jerome John Perry, Ph.D., Professor, Microbiology
 T. O. Perry, Ph.D., Professor, Forestry
 R. E. Peterson, Ed.D., Associate Professor, Occupational Education
 Howard Aldridge Petrea, M.A., Associate Professor, Mathematics
 Robert Bruce Petters, Ph.D., Assistant Director, Music
 Christine M. Pierce, Ph.D., Associate Professor, Philosophy and Religion
 Dwain Harvey Pilkington, Ph.D., Extension Assistant Professor, Food Science
 Beryl Cox Pittman, B.S., Lecturer, English
 Kenneth H. Pollock, Ph.D., Associate Professor, Statistics
 Kevin R. Pond, Ph.D., Assistant Professor, Animal Science
 Samuel B. Pond, III, Ph.D., Assistant Professor, Psychology
 Susan Bittner Pond, M.A., Lecturer, English
 Richard Porter, Ph.D., Assistant Professor, Materials Engineering

Ruie J. Pritchard, Ph.D., Assistant Professor, Curriculum and Instruction
Gregory Prygrocki, M.V.A., Associate Professor, Design
Suzanne T. Purrington, Ph.D., Associate Professor, Chemistry

R

M. S. Rahman, Ph.D., Associate Professor, Civil Engineering
Robert Todd Ramsay, Ph.D., Assistant Professor, Mathematics
J. Patrick Rand, M.Arch., Associate Professor, Architecture
C. E. Raynor, M.Ed., Lecturer, Physical Education
Thomas H. Regan, Ph.D., Professor, Philosophy and Religion
David W. Reid, B.S., Visiting Instructor, Computer Science
R. K. Reid, Ph.D., Visiting Lecturer, Genetics
Faith A. Rifki, M.Arch., Assistant Professor, Architecture
Barbara Risman, Ph.D., Assistant Professor, Sociology and Anthropology
Woodrow E. Robbins, Ph.D., Associate Professor, Computer Science
T. C. Roberts, M.A., Lecturer, Physical Education
Jo Ann Rockness, Ph.D., Assistant Professor, Economics and Business
C. J. Roddy, B.S., Teaching Technician, Physics
Jesus Rodriguez, Ph.D., Assistant Professor, Mathematics
June Emma Rohrbach, M.Ed., Lecturer, Mathematics
Roger P. Rohrbach, Ph.D., Professor, Biological and Agricultural Engineering
J. P. Roise, Ph.D., Assistant Professor, Forestry
E. W. Rollins, Ph.D., Associate Professor, Foreign Languages and Literatures
Robert Thomas Roote, M.A., Lecturer, English
William A. Ross, M.Ed., Lecturer, Occupational Education
Robert Rossana, Ph.D., Associate Professor, Economics and Business
Irwin Rovner, Ph.D., Associate Professor, Sociology and Anthropology
Willard D. Ruchte, B.S., Adjunct Lecturer, Computer Science
Lawrence Sheldon Rudner, Ph.D., Associate Professor, English
James Lorin Rulla, Ph.D., Assistant Professor, Mathematics
Richard Jeffrey Ruppel, M.A., Lecturer, English
John Eual Rushing, Ph.D., Assistant Professor, Food Science
Burton L. Russell, Ph.D., Associate Professor, Speech-Communication

S

Ronald H. Sack, Ph.D., Professor, History
L. M. Safley, Jr., Ph.D., Associate Professor, Biological and Agricultural Engineering
Hans Sagan, Ph.D., Professor, Mathematics
Linda W. Sanders, M.Arch., Assistant Professor and Assistant Head, Architecture
Marilyn G. Schiermeier, M.Ed., Lecturer, Mathematics
Robert L. Schrag, Ph.D., Associate Professor, Speech-Communication
Anton F. Schreiner, Ph.D., Professor, Chemistry
Dennis A. Schur, M.B.A., Adjunct Lecturer, Computer Science
Steven J. Schwartz, Ph.D., Assistant Professor, Food Science
E. Russell Secrest, Jr., B.S., Adjunct Lecturer, Computer Science
James Francis Selgrade, Ph.D., Associate Professor, Mathematics
R. C. Serow, Ph.D., Associate Professor, Educational Leadership and Program Evaluation
Sharon McClanahan Setzer, Ph.D., Lecturer, English
Brian William Sheldon, Ph.D., Assistant Professor, Food Science
Robert Silber, Ph.D., Associate Professor, Mathematics
Sofus Simonsen, Ph.D., Associate Professor, Foreign Languages and Literatures
Edward C. Sisler, Ph.D., Professor, Biochemistry
Richard Wayne Skaggs, Ph.D., William Neal Reynolds Professor, Biological and Agricultural Engineering
C. J. Skender, B.S., Lecturer, Economics and Business
Frederick O. Smetana, Ph.D., Professor, Mechanical and Aerospace Engineering
Carl Brent Smith, Ph.D., Associate Professor, Textile Chemistry
D. W. Smith, Ph.D., Visiting Assistant Professor, Physics
E. V. Smith, M.A., Lecturer, Physical Education
Frank J. Smith, Ph.D., Associate Professor, Psychology
J. C. Smith, Ph.D., Associate Professor, Civil Engineering
John David Smith, Ph.D., Assistant Professor, History
Norwood Graham Smith, M.A., Associate Professor, English
R. R. Smith, M.S., Lecturer, Physical Education
W. D. Smith, M.S., Lecturer, Forestry
Ronald Ernest Sneed, Ph.D., Extension Professor, Biological and Agricultural Engineering
Samuel S. Snyder, Ph.D., Associate Professor, Psychology
Constance Altman Sowell, M.A., Visiting Lecturer, English
Robert S. Sowell, Ph.D., Professor, Biological and Agricultural Engineering
Edward Stack, Ph.D., Professor, Foreign Languages and Literatures
Clayton L. Stalnaker, M.A., Lecturer, University Studies
Ephraim Stam, Ph.D., Professor Emeritus, Nuclear Engineering
D. H. J. Steensen, Ph.D., Associate Professor, Forestry
Allen Frederick Stein, Ph.D., Professor, English

Edward Stejskal, Ph.D., Professor, Chemistry
 Robert E. Sternloff, Ph.D., Professor, Recreation Resources Administration
 S. Christopher Stevenson, Ph.D., Visiting Assistant Professor, Curriculum and Instruction
 Lee V. Stiff, Ph.D., Assistant Professor, Mathematics and Science Education
 Larry F. Stikeleather, Ph.D., Professor, Biological and Agricultural Engineering
 Ernest Lester Stitzinger, Ph.D., Professor, Mathematics
 Edward F. Stoddard, Ph.D., Associate Professor, Marine, Earth and Atmospheric Sciences
 Charles Wilson Suggs, Ph.D., Professor, Biological and Agricultural Engineering
 Elizabeth M. Suval, Ph.D., Professor, Sociology and Anthropology
 Harold Everett Swaisgood, Ph.D., William Neal Reynolds Professor, Food Science
 Kenneth Ray Swartzel, Ph.D., Associate Professor, Food Science
 James E. Swiss, Ph.D., Associate Professor, Political Science and Public Administration
 William L. Switzer, Ph.D., Associate Professor, Chemistry

T

Fred Russell Tarver, Jr., Ph.D., Extension Professor, Food Science
 Raymond G. Taylor, Jr., Ed.D., Professor, Educational Leadership and Program Evaluation
 Elizabeth C. Theil, Ph.D., Professor, Biochemistry
 Frank Bancroft Thomas Ph.D., Extension Professor, Food Science
 Randall J. Thomson, Ph.D., Associate Professor, Sociology and Anthropology
 Terrence A. Tollefson, Ph.D., Visiting Lecturer, Adult and Community College Education
 Charles Tomasino, Ph.D., Professor, Textile Chemistry
 Donald T. Tomaskovic-Devey, Ph.D., Assistant Professor, Sociology and Anthropology
 Samuel B. Tove, Ph.D., Professor, Biochemistry
 Mireille Tronel-Peyroz, M.A., Visiting Lecturer, Foreign Languages and Literatures
 Kay M. Troost, Ph.D., Associate Professor, Sociology and Anthropology
 Lynn Gilbert Turner, Ph.D., Associate Professor, Food Science
 Walter W. Turyn, Jr., M.B.A., Adjunct Lecturer, Computer Science

U

David Frederick Ullrich, Ph.D., Associate Professor, Mathematics
 Odell Uzzell, Ph.D., Professor, Sociology and Anthropology

V

James C. VanderKam, Ph.D., Professor, Philosophy and Religion
 Albert Donald VanDeVeer, Ph.D., Professor, Philosophy and Religion
 Deborah Jean Vause, B.A., Visiting Lecturer, English

W

George H. Wahl, Jr., Ph.D., Professor, Chemistry
 N. William Walker, Ed.D., Associate Professor, Psychology
 James M. Wallace, Ph.D., Associate Professor, Sociology and Anthropology
 William Mood Walter, Jr., Ph.D., Professor, Food Science
 Eleania Bailey Ward, B.M.E., Assistant Director, Music
 Laviece Cox Ward, M.A., Lecturer, English
 Gail R. Waters, M.Ed., Visiting Instructor, Curriculum and Instruction
 William N. Waters, Jr., Ph.D., Associate Professor, Mathematics and Science Education
 Larry W. Watson, Ed.D., Associate Professor, Mathematics and Science Education
 B. D. Webb, M.S., Lecturer, Occupational Education
 Gary Roy Weinberg, M.A., Lecturer, English
 R. J. Weir, Ph.D., Associate Professor, Forestry
 R. E. Wenig, Ph.D., Associate Professor, Occupational Education
 Oscar Wesler, Ph.D., Professor, Statistics
 Walter Wessels, Ph.D., Associate Professor, Economics and Business
 Harry Carter West, Ph.D., Associate Professor, English
 Bert W. Westbrook, Ed.D., Professor, Psychology
 Philip W. Westerman, Ph.D., Professor, Biological and Agricultural Engineering
 William David Weston, Ph.D., Director, Cooperative Education
 John H. Wheatley, Ph.D., Associate Professor, Mathematics and Science Education
 J. Oliver Williams, Ph.D., Professor, Political Science and Public Administration
 Lavern Williams, M.A., Instructor, Mathematics
 Paul Williams, Ph.D., Associate Professor, Economics and Business
 Norman F. Williamson, Ph.D., Assistant Professor, Computer Science
 Daniel H. Willits, Ph.D., Professor, Biological and Agricultural Engineering
 Jack Wilson, Ph.D., Associate Professor, Economics and Business
 Edward Hempstead Wisner, Ph.D., Professor, Biological and Agricultural Engineering
 Mary Ann Witt, Ph.D., Associate Professor, Foreign Languages and Literatures
 Eric M. Woodrum, Ph.D., Associate Professor, Sociology and Anthropology
 Alma C. Wright, M.A., Visiting Lecturer, Foreign Languages and Literatures
 Stephen Joseph Wright, Ph.D., Assistant Professor, Mathematics
 Tommy E. Wynn, Ph.D., Associate Professor, Botany

Y

Clyde Thomas Young, Ph.D., Professor, Food Science

James Herbert Young, Ph.D., Professor, Biological and Agricultural Engineering

Robert Vaughan Young, Ph.D., Professor, English

Z

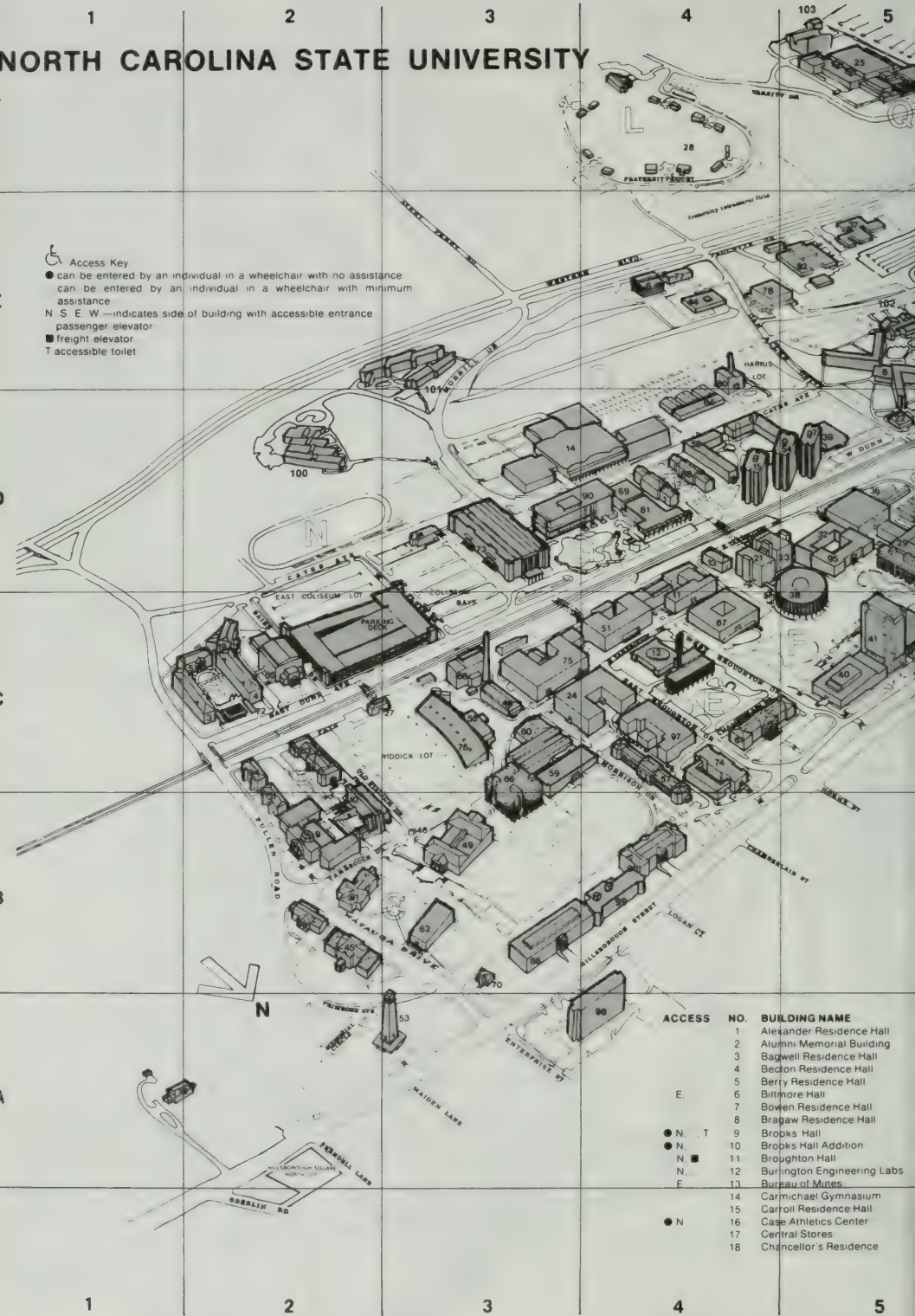
William J. Zielinski, Ph.D., Visiting Instructor, Zoology

G. J. Zuckerman, Ph.D., Associate Professor, Economics and Business



NORTH CAROLINA STATE UNIVERSITY

- Access Key
- can be entered by an individual in a wheelchair with no assistance
 - can be entered by an individual in a wheelchair with minimum assistance
 - N S E W—indicates side of building with accessible entrance
 - passenger elevator
 - freight elevator
 - T accessible toilet



ACCESS	NO.	BUILDING NAME
	1	Alexander Residence Hall
	2	Alumni Memorial Building
	3	Bagwell Residence Hall
	4	Bedson Residence Hall
	5	Berry Residence Hall
E.	6	Billmore Hall
	7	Bowen Residence Hall
	8	Bragaw Residence Hall
● N . T	9	Brooks Hall
● N .	10	Brooks Hall Addition
N . ■	11	Broughton Hall
N .	12	Burlington Engineering Labs
E	13	Bureau of Mines
	14	Carmichael Gymnasium
	15	Carroll Residence Hall
● N	16	Care Athletics Center
	17	Central Stores
	18	Chancellor's Residence



Director of Summer Sessions
North Carolina State University
Box 7401
Raleigh, N. C. 27695-7401

Second Class Postage Paid at
Raleigh, North Carolina 27611



December 1986



North Carolina State University

BULLETIN

Undergraduate
Catalog
1987-1989



This catalog is intended for informational purposes only. Requirements, rules, procedures, courses and informational statements set forth herein are subject to change. Notice of changes will be conveyed to duly enrolled students and other appropriate persons at the time such changes are effected.

NORTH CAROLINA STATE UNIVERSITY BULLETIN

(USPS 393-040)

VOLUME 86

DECEMBER 1986

NUMBER 4

Published four times a year in February, June, August and December by North Carolina State University, Office of Undergraduate Admissions, Peele Hall, Box 7103, Raleigh, N.C. 27695-7103. Second class postage paid at Raleigh, N.C. 27611.

North Carolina State University



Undergraduate Catalog

1987-89



Contents

North Carolina State University	5
NCSU Administration and Offices	8
Academic Calendar	10
Academic Fields of Study and Degrees	14
Arts Studies	20
Honors and Scholars Programs	21
Scholarships	22
Special Academic Programs	23
International Programs and Activities	26
Admissions	31
Orientation	35
Registration	36
Tuition and Fees	37
Financial Aid	42
Student Housing	44
Academic Policies and Procedures	46
Student Services	59
Student Activities	63
Schools, Departments, and Programs of Study	69
School of Agriculture and Life Sciences	73
School of Design	117
School of Education	127
School of Engineering	148
School of Forest Resources	176
School of Humanities and Social Sciences	191
School of Physical and Mathematical Sciences	211
School of Textiles	229
School of Veterinary Medicine	244
Other Academic and Administrative Units	247
Music Department	247
Military Education and Training	247
Graduate School	251
University Extension	251
University Libraries	254
University Computing	255
Research Centers and Facilities	256
University Development	263
University Relations	265
Course Descriptions	285
The University of North Carolina	457
North Carolina State University	459
Historical Sketch	459
Role and Mission Statement	460
Board of Trustees	463
Administrative Council	463
Faculty and Other Academic Personnel	465
Index	510
Campus Map	514



Prominent in the above aerial of the central North Carolina State University campus are three high-rise residence halls (foreground), the circular Harrelson Hall with the adjacent towers of Cox and Dabney Halls, and in the upper left, the tower of the D. H. Hill Library. The central campus encompasses some 623 acres.



Dr. Bruce R. Poulton is North Carolina State University's tenth chancellor.

North Carolina State University

North Carolina State University is celebrating its centennial year from July 1, 1986, through June 30, 1987. A century has passed since the North Carolina State Legislature signed the bill of March 7, 1887, establishing the university. Since that time, North Carolina State University has become one of the nation's major public universities, sharing the distinctive character of Land-Grant universities nationally—broad academic offerings, extensive public service, national and international activities, and large-scale extension and research programs.

The university is organized into nine schools and the Graduate School, which offer academic programs in 89 fields leading to baccalaureate degrees, 75 master's degree fields and 48 fields leading to doctoral level degrees. The nine schools are Agriculture and Life Science, Design, Education, Engineering, Forest Resources, Humanities and Social Sciences, Physical and Mathematical Sciences, Textiles, and Veterinary Medicine. In addition, a complex of divisions, institutes, and centers provides a wide range of special academic, research, and extension programs. Currently, research activities span a broad spectrum of about 750 scientific, technological, and scholarly endeavors.

The university has approximately 8,600 employees. Faculty and other academic personnel total 2,900, including 1,400 graduate faculty and 260 adjunct faculty members.

Extension offices carry teaching and applied research programs to each of North Carolina's 100 counties and to the Cherokee Indian Reservation. These programs cover such diverse fields as agriculture, design, education, forestry, engineering, humanities, marine science, textiles, urban affairs, and veterinary medicine.

North Carolina State University has 88,000 acres of land across the state, including a research and endowment forest of 78,000 acres. Near the main campus are research farms; biology and ecology sites; genetics, horticulture and floriculture nurseries; forests; and areas such as Carter-Finley Stadium, which together comprise 2,500 acres.

During the past 100 years, 106 major buildings have been erected on the 623-acre central campus. Recent acquisition of 780 acres adjacent to campus ensures room for expansion in the years to come. This land, the Centennial Campus, offers the university an opportunity to develop many needed facilities and establish partnerships with industry and government.

The university's Wolfpack athletic teams are well-known nationally. The basketball team won national championships in 1974 and again in 1983. The football team has been the Atlantic Coast Conference champion five times and co-champion twice and has won five bowl games. Numerous N. C. State athletes have won NCAA titles, national championships, and international honors,

including medals in the last four Olympic Games in which the United States has competed. The Wolfpack women's intercollegiate cross-country team won national championships in 1979 and 1980. An N. C. State woman was the first woman to win the coveted ACC "Athlete of the Year" award in 1980, and she won it again in 1981 for her performances in distance running. A Wolfpack athlete won the first women's NCAA individual cross-country championship in 1981, and again in 1985 one of our athletes was women's individual champion. The women's basketball, the wrestling team, and swimming teams have also ranked nationally. Our women's basketball coach was selected in 1986 to coach the U.S. team in the World University Games and this team won two international championships. She has been selected to coach the women's basketball team in the 1988 Olympics.

North Carolina State University is one of the three Research Triangle Universities along with Duke University and the University of North Carolina at Chapel Hill. In the 30-mile triangle formed by the three universities is the 5,000-acre Research Triangle Park, the Research Triangle Institute (a Universities' subsidiary), and the Triangle Universities Computation Center, a central facility for the extensive computing activities of the institutions.

N. C. State's enrollment reached more than 24,500 in the 1986 fall semester. There are 16,700 students in undergraduate degree programs, 3,500 in graduate degree programs, and more than 3,400 lifelong education students in various categories. The combined undergraduate and graduate enrollments by school are Agriculture and Life Sciences—3,232; Design—617; Education—1,205; Engineering—6,497; Forest Resources—709; Humanities and Social Sciences—4,757; Physical and Mathematical Sciences—2,346; Textiles—877; and Veterinary Medicine—307. The total student population includes approximately 2,300 black students, 1,800 other minority students, and 9,300 female students. Students at State come from 50 states, three U.S. territories and 91 countries. The international enrollment is a distinctive feature of the institution since its more than 1,100 international students give it a decidedly cosmopolitan atmosphere.

North Carolina State University is committed to equality of educational opportunity and does not discriminate against applicants, students, or employees based on race, color, national origin, religion, sex, age, or handicap. Moreover, North Carolina State University is open to people of all races and actively seeks to promote racial integration by recruiting and enrolling a larger number of black students.

NCSU is a member of the National Association of State Universities and Land-Grant Colleges, the American Council on Education, the American Council of Learned Societies, the Association of Governing Boards of Universities and Colleges, the Oak Ridge Associated Universities, the International University Consortium for Telecommunications in Learning, the North Carolina Association of Colleges and Universities, and the Cooperating Raleigh Colleges.

ACCREDITATION

North Carolina State University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools. In addition, many of the

university's professional programs and departments are accredited by national professional associations, including:

- Accreditation Board for Engineering and Technology
- American Chemical Society
- Council on Social Work Education
- Landscape Architectural Accrediting Board
- National Architectural Accrediting Board
- National Association of Schools of Public Affairs and Administration
- National Council for Accreditation of Teacher Education
- National Recreation and Park Association
- Society of American Foresters
- Society of Wood Science and Technology

NONDISCRIMINATION POLICY

North Carolina State University is dedicated to equality of opportunity within its community. Accordingly, North Carolina State University does not practice or condone discrimination, in any form, against students, employees, or applicants on the grounds of race, color, national origin, religion, sex, age, or handicap.

North Carolina State University commits itself to positive action to secure equal opportunity regardless of those characteristics.

North Carolina State University supports the protection available to members of its community under all applicable Federal laws, including Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Sections 799A and 845 of the Public Health Service Act, the Equal Pay and Age Discrimination Acts, the Rehabilitation Act of 1973, the Vietnam Veteran's Readjustment Assistance Act of 1974, and Executive Order 11246.

For information concerning these provisions, contact:

- Lawrence M. Clark
- Affirmative Action Officer
- 201 Holladay Hall
- Box 7101
- North Carolina State University
- Raleigh, North Carolina 27695-7101
- Phone: 919 737-3409 or 737-3148

NCSU Administration and Offices

CHANCELLOR'S OFFICE

Bruce R. Poulton, *Chancellor*
Karen R. Peterson, *Executive Assistant to the Chancellor for Policy and Planning*
Becky R. French, *University Counsel*
William H. Simpson, *Secretary of the University*
Hardy D. Berry, *Assistant Vice Chancellor, Communications*
Alumni Relations
Bryce R. Younts, *Director*
Institutional Research
Richard D. Howard, *Director*

PROVOST'S OFFICE

Nash N. Winstead, *Provost and Vice Chancellor*
Lawrence M. Clark, *Associate Provost and Affirmative Action Officer*
Murray S. Downs, *Associate Provost for Undergraduate Programs*
Henry E. Schaffer, *Assistant Provost for Academic Computing*
Academic Skills Program
E. Hugh Fuller, *Director*
Undergraduate Admissions
Anna P. Keller, *Dean*
University Cooperative Education Program
William D. Weston, *Director*

SCHOOL OF AGRICULTURE AND LIFE SCIENCES

Durwood F. Bateman, *Dean*
James L. Oblinger, *Associate Dean and Director, Academic Affairs*
Chester D. Black, *Associate Dean and Director, Agricultural Extension Service*
Ronald, J. Kuhr, *Associate Dean and Director, Agricultural Research Service*
Robert E. Cook, *Assistant Dean*

SCHOOL OF DESIGN

Claude E. McKinney, *Dean*
Robert P. Burns, *Associate Dean*
Charles E. Joyner, *Assistant Dean*

SCHOOL OF EDUCATION

Carl J. Dolce, *Dean*
Robert T. Williams, *Associate Dean*
Hubert A. Exum, *Associate Dean*

SCHOOL OF ENGINEERING

Larry K. Monteith, *Dean*

George F. Bland, *Associate Dean for Undergraduate Programs*
Thomas S. Elleman, *Associate Dean for Research*
James K. Ferrell, *Associate Dean for Graduate Programs*
Hubert Winston, *Director of Academic Affairs*

SCHOOL OF FOREST RESOURCES

Eric L. Ellwood, *Dean*
LeRoy C. Saylor, *Associate Dean for Academic Affairs*
Ellis B. Cowling, *Associate Dean for Research*

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

William B. Toole, III, *Dean*
M. Mohan Sawhney, *Associate Dean*
G. David Garson, *Associate Dean for Planning and Management*
Edith D. Sylla, *Assistant Dean for Research and Graduate Programs*

SCHOOL OF PHYSICAL AND MATHEMATICAL SCIENCES

Garrett Briggs, *Dean*
Robert D. Bereman, *Associate Dean for Academic Affairs*
Leslie B. Sims, *Associate Dean for Research*

SCHOOL OF TEXTILES

Dame S. Hamby, *Dean*
Perry L. Grady, *Associate Dean*
Mansour H. Mohamed, *Associate Dean for Academic Programs*
W. K. Walsh, *Associate Dean for Research*

SCHOOL OF VETERINARY MEDICINE

Terrence M. Curtin, *Dean*
Donald R. Howard, *Associate Dean and Director of Academic Affairs*
Charles E. Stevens, *Associate Dean and Director of Research and Graduate Studies*
William M. Adams, *Associate Dean and Director of Veterinary Medical Services*

THE GRADUATE SCHOOL

Debra W. Stewart, *Interim Dean*
Raymond E. Fornes, *Associate Dean*
A. C. Witherspoon, *Associate Dean*

DIVISION OF UNIVERSITY STUDIES

John M. Riddle, *Head*

RESEARCH OFFICE

Franklin D. Hart, *Vice Chancellor for Research*

Philip B. Carter, *Associate Vice Chancellor for Research*

INTERNATIONAL PROGRAMS OFFICE

J. Lawrence Apple, *Coordinator*

UNIVERSITY LIBRARIES

I. T. Littleton, *Director*

COMPUTING CENTER

Carl W. Malstrom, *Director*

EXTENSION AND PUBLIC SERVICE

William L. Turner, *Vice Chancellor for Extension and Public Service*

Grover J. Andrews, *Associate Vice Chancellor for Extension and Public Service*

Kelly R. Crump, *Director, Division for Lifelong Education*

Robert K. White, *Director, Adult Credit Program Development*

Denis S. Jackson, *Director, McKimmon Center*

John F. Cudd, *Director, Summer Sessions*

DIVISION OF STUDENT AFFAIRS

Thomas H. Stafford, Jr., *Vice Chancellor*

Henry Bowers, *Associate Vice Chancellor*

Gerald G. Hawkins, *Associate Vice Chancellor*

Ronald C. Butler, *Associate Vice Chancellor*

Charles A. Haywood, *Associate Vice Chancellor*

Art,

Charlottee V. Brown, *Curator*

Career Planning and Placement Center

Walter B. Jones, *Director*

Counseling Center

M. Lee Salter, *Director*

Financial Aid

Carl O. Eycke, *Director*

Health Services

Jerry W. Barker, *Director*

Housing and Residence Life

Cynthia P. Bonner, *Director*

International Student Office

Donald R. Roberts, *Director*

Music Department

J. Perry Watson, *Director*

Registration and Records

James H. Bundy, *Registrar*

Student Development

Evelyn M. Reiman, *Director*

Study Abroad Office

Cynthia F. Chalou, *Director*

University Dining

Vickie Siliski, *Director*

University Student Center

Henry Bowers, *Director*

Upward Bound Program

Cynthia J. Harris, *Director*

OFFICE OF FINANCE AND BUSINESS

George L. Worsley, *Vice Chancellor for Finance and Business*

Lauren J. Brisky, *Associate Vice Chancellor of Finance and Business*

Darryl W. Bierly, *Assistant Vice Chancellor for Finance*

Charles D. Leffler, *Assistant Vice Chancellor for Business*

Administrative Computing Service

H. Leo Buckmaster, *Director*

Campus Planning and Construction

Edwin F. Harris, Jr., *Director and University Architect*

Contracts and Grants

Earl N. Pulliam, *Director*

Human Resources

Alice R. Miller, *Director*

Payroll and Benefits

S. Jill Worthington, *Director*

Physical Plant

Charles C. Braswell, *Director*

Public Safety

James W. Cunningham, *Director*

Purchase and Stores

Ed Sikoski, *Director*

Student Accounts

W. R. Styons, *Director*

Students Supply Stores

G. Robert Armstrong, *General Manager*

Transportation

Janis Y. Rhodes, *Director*

DEVELOPMENT

John T. Kanipe, Jr., *Vice Chancellor for University Development*

UNIVERSITY RELATIONS

Albert B. Lanier, Jr., *Director*

Information Services

Lucy C. Coulbourn, *Director*

ATHLETICS

James T. Valvano, *Director*

Academic Calendar

SPRING SEMESTER, 1987

January	5	Mon.	Orientation and Advising
January	6	Tues.	Registration/Change Day
January	8	Thurs.	First day of classes
January	14	Wed.	Last day to add a course without permission of instructor
January	21	Wed.	Last day to add a course; last day to withdraw or drop a course with a refund; last day for undergraduate students to drop below 12 hours. <i>The tuition and fees charge is based on the number of hours and courses officially carried as of this date.</i>
February	4	Wed.	Last day to withdraw or drop a course without a grade, or to change from credit to audit, at the 400 level or below
February	18	Wed.	Mid-semester reports due.
February	27	Fri.	Spring vacation begins at 10:00 p.m.
March	9	Mon.	Classes resume at 7:50 a.m.
March	13	Fri.	Last day to withdraw or drop a course at the 500 or 600 level without a grade
April	20	Mon.	Holiday
April	24	Fri.	Last day of classes
April	27-	Mon.-Sat.	Final examinations
May	5	Mon.-Tues.	
May	9	Sat.	Commencement

SUMMER SESSIONS, 1987

First Session

May	18	Mon.	Registration/Change Day
May	19	Tues.	First day of classes
May	20	Wed.	Last day to add a course without permission of instructor
May	25	Mon.	Last day to add a course; last day to withdraw or drop a course with a refund. <i>The tuition and fees charge is based on the number of hours and courses officially carried as of this date.</i>
May	29	Fri.	Last day to withdraw or drop a course without a grade, or to change from credit to audit, at the 400 level or below
June	5	Fri.	Last day to withdraw or drop a course at the 500 or 600 level without a grade
June	22	Mon.	Last day of classes
June	23-24	Tues.-Wed.	Final examinations

Second Session

June	29	Mon.	Registration/Change Day
June	30	Tues.	First day of classes
July	1	Wed.	Last day to add a course without permission of instructor
July	3	Fri.	Holiday
July	6	Mon.	Last day to add a course; last day to withdraw or drop a course with a refund. <i>The tuition and fees charge is based on the number of hours and courses officially carried as of this date.</i>

July	10	Fri.	Last day to withdraw or drop a course without a grade, or to change from credit to audit, at the 400 level or below
July	17	Fri.	Last day to withdraw or drop a course at the 500 or 600 level without a grade
August	3	Mon.	Last day of classes
August	4-5	Tues.-Wed.	Final examinations

FALL SEMESTER, 1987

August	20	Thurs.	Orientation and Advising
August	21	Fri.	Registration/Change Day
August	24	Mon.	First day of classes
August	31	Mon.	Last day to add a course without permission of instructor
September	7	Mon.	Holiday
September	8	Tues.	Last day to add a course; last day to withdraw or drop a course with a refund; last day for undergraduate students to drop below 12 hours. <i>The tuition and fees charge is based on the number of hours and courses officially carried as of this date.</i>
September	21	Mon.	Last day to withdraw or drop a course without a grade, or to change from credit to audit, at the 400 level or below
October	2	Fri.	Mid-semester reports due
October	9	Fri.	Fall vacation begins at 10:00 p.m.
October	14	Wed.	Classes resume at 7:50 a.m.
October	23	Fri.	Last day to withdraw or drop a course at the 500 or 600 level without a grade
November	24	Tue.	Thanksgiving vacation begins at 10:00 p.m.
November	30	Mon.	Classes resume at 7:50 a.m.
December	4	Fri.	Last day of classes
December	7-15	Mon.-Sat. Mon.-Tues.	Final examinations

SPRING SEMESTER, 1988

January	8	Fri.	Orientation and Advising
January	8	Fri.	Registration/Change Day
January	11	Mon.	First day of classes
January	18	Mon.	Last day to add a course without permission of instructor
January	25	Mon.	Last day to add a course, last day to withdraw or drop a course with a refund; last day for undergraduate students to drop below 12 hours. <i>The tuition and fees charge is based on the number of hours and courses officially carried as of this date.</i>
February	8	Mon.	Last day to withdraw or drop a course without a grade, or to change from credit to audit, at the 400 level or below
February	22	Mon.	Mid-semester reports due
March	4	Fri.	Spring vacation begins at 10:00 p.m.
March	14	Mon.	Classes resume at 7:50 a.m.
March	18	Fri.	Last day to withdraw or drop a course at the 500 or 600 level without a grade
April	4	Mon.	Holiday
April	22	Fri.	Last day of classes
April	25-	Mon.-Sat.	Final examinations
May	3	Mon.-Tues.	
May	7	Sat.	Commencement

SUMMER SESSIONS, 1988

First Session

May	23	Mon.	Registration Day/Change Day
May	24	Tues.	First day of classes
May	25	Wed.	Last day to add a course without permission of instructor
May	30	Mon.	Last day to add a course; last day to withdraw or drop a course with a refund. <i>The tuition and fees charge is based on the number of hours officially carried as of this date.</i>
June	3	Fri.	Last day to withdraw or drop a course without a grade, or to change from credit to audit, at the 400 level or below
June	10	Fri.	Last day to withdraw or drop a course at the 500 or 600 level without a grade
June	24	Fri.	Last day of classes
June	27-28	Mon.-Tues.	Final examinations

Second Session

July	5	Tues.	Registration Day/Change Day
July	6	Wed.	First day of classes
July	7	Thurs.	Last day to add a course without permission of instructor
July	11	Mon.	Last day to add a course; last day to withdraw or drop a course with a refund. <i>The tuition and fees charge is based on the number of hours and courses officially carried as of this date.</i>
July	15	Fri.	Last day to withdraw or drop a course without a grade, or to change from credit to audit, at the 400 level or below
July	22	Fri.	Last day to withdraw or drop a course at the 500 or 600 level without a grade
August	8	Mon.	Last day of classes
August	9-10	Tues.-Wed.	Final examinations

FALL SEMESTER, 1988

August	25	Thurs.	Orientation and Advising
August	26	Fri.	Registration/Change Day
August	29	Mon.	First day of classes
September	5	Mon.	Holiday
September	6	Tues.	Last day to add a course without permission of instructor
September	12	Mon.	Last day to add a course; last day to withdraw or drop a course with a refund; last day for undergraduate students to drop below 12 hours. <i>The tuition and fees charge is based on the number of hours and courses officially carried as of this date.</i>
September	26	Mon.	Last day to withdraw or drop a course without a grade, or to change from credit to audit, at the 400 level or below
October	7	Fri.	Mid-semester reports due
October	14	Fri.	Fall vacation begins at 10:00 p.m.
October	19	Wed.	Classes resume at 7:50 a.m.
October	28	Fri.	Last day to withdraw or drop a course at the 500 or 600 level without a grade

November	22	Tue.	Thanksgiving vacation begins at 10:00 p.m.
November	28	Mon.	Classes resume at 7:50 a.m.
December	9	Fri.	Last day of classes
December	12-20	Mon.-Sat. Mon.-Tues.	Final examinations

Note: This calendar is subject to periodic review and revision.



Academic Fields of Study and Degrees

North Carolina State University offers more than 89 fields of study at the undergraduate level. These fields of study include comprehensive academic programs leading to various baccalaureate degrees. Some are options within degree programs, such as the Microbiology Option within the B.S. in Biological Sciences or the Writing-Editing Option within the B.A. in English. The Individualized Study Program in Agriculture and Life Sciences and the Multidisciplinary Studies Program in Humanities and Social Sciences each provide opportunities for creating additional fields of study to meet the specialized needs of particular students.

The following are the undergraduate fields of study available at North Carolina State University:

Agriculture

- Agronomy
- Animal Science
- Food Science
- Horticultural Science
- Pest Management for Crop Protection
- Poultry Science

Business

- Accounting
- Agricultural Business Management
- Business Management

Biological Sciences

- Biochemistry
- Biological Sciences
- Botany
- Microbiology
- Zoology

Design

- Architecture
- Environmental Design
- Landscape Architecture
- Product Design
- Visual Design

Education (including teacher certification)

- Agricultural Education (grades 9-12)
- Education, General Studies
- English (grades 9-12)
- French Language and Literature (grades 9-12)
- Health Occupations Education (grades 9-12 or postsecondary)

- Industrial Arts Education (grades 9-12)

- Marketing Education for Teachers (grades 9-12)

- Mathematics Education (grades 6-9 or 9-12)

- Middle Grades Education (grades 6-9)

- Science Education (grades 6-9 or 9-12)

- Social Studies (grades 9-12)

- Spanish Language and Literature (grades 9-12)

- Technical Education (postsecondary)

- Vocational Industrial Education (grades 9-12)

Engineering

- Aerospace Engineering
- Biological and Agricultural Engineering

- Chemical Engineering

- Civil Engineering

- Computer Engineering

- Construction Engineering

- Construction Management

- Electrical Engineering

- Engineering

- Furniture Manufacturing and Management

- Industrial Engineering

- Materials Engineering

- Mechanical Engineering

- Nuclear Engineering

- Textile Engineering

Forestry and Natural Resources

- Conservation

- Fisheries and Wildlife Sciences

- Forestry

Humanities

English
French Language and Literature
History
Philosophy
Spanish Language and Literature
Speech-Communication
Writing-Editing

Individualized Programs

Individualized Study Program (Agriculture and Life Sciences)
Multi-disciplinary Studies (Humanities and Social Sciences)

Mathematics and Related Sciences

Applied Mathematics
Computer Science
Mathematics
Statistics

Medical and Veterinary Sciences

Medical Technology
Pre-dental
Pre-medical
Pre-veterinary

Physical Sciences

Chemistry
Geology
Meteorology
Physics

Psychology

Human Resource Development
Psychology

Recreation

Recreation Resources Administration

Social Sciences

Agricultural Economics
Applied Sociology
Criminal Justice
Economics
Political Science
Social Work
Sociology

Textiles

Textile Chemistry
Textile Management
Textile Science
Textiles

Wood Science

Pulp and Paper Science and Technology
Wood Science and Technology

PRE-PROFESSIONAL PROGRAMS

Pre-Law Program. Law schools neither prescribe nor recommend a particular undergraduate curriculum for prospective candidates. A student may prepare for law school by a careful use of electives within any of the baccalaureate curricula offered by the eight schools with undergraduate programs. Each of the degree-granting departments in the School of Humanities and Social Sciences has a faculty adviser designated to assist pre-law students with the selection of appropriate electives and concentrations. All students interested in pre-law are invited to participate in the Pre-Law Students Association. For further information, consult Prof. D. L. Baumer, 220 Patterson Hall, 737-2608, or Prof. T. V. Reid, 223 Link Building, 737-2481.

Pre-Medicine, Pre-Dentistry, and Pre-Optometry Programs. Students preparing for medical, dental, or optometry school may major in such areas as the physical or natural sciences (frequently zoology or chemistry) or engineering. They may also major in one of the humanities or social sciences by taking a B.A. degree with the necessary science courses as electives or by taking a B.S. degree in economics, English, history, philosophy, or political science with an appropriate science or technology concentration. Health science professional schools are more interested in the quality and scope of a student's training than in his or her major field. The Departments of Zoology and Chemistry offer pre-medical and

pre-dental curricula leading to a B.S. degree in Zoology or a B.S. or B.A. degree in Chemistry. A University Review Committee for Pre-professional Applicants in Health Sciences assists students in preparing materials for completing applications, acquiring requested information, and providing evaluations to professional schools. For further information, consult Dr. W. C. Grant, Zoology, chairman of the Review Committee, or the pre-professional health science advisers in several schools: Prof. F. M. Richardson, Engineering; Dr. M. L. Miles, Physical and Mathematical Sciences; or Dr. A. F. Stein, Humanities and Social Sciences.

Pre-Veterinary Program. A pre-veterinary program of study is offered by the School of Agriculture and Life Sciences which may be taken by students majoring in animal science, poultry science, zoology, or biological sciences as well as in other science curricula. If a student is accepted to veterinary medical school before completion of his or her undergraduate degree, some course credits may be transferable from the veterinary program toward completion of the Bachelor of Science degree. Arrangements for this procedure should be made with the degree-granting school or department prior to entering veterinary school. For further information, consult the Director of Academic Affairs of the School of Agriculture and Life Sciences. For general information concerning admission to the Doctor of Veterinary Medicine programs at NCSU, consult the School of Veterinary Medicine Admissions Office.

UNDERGRADUATE MINORS

The following are the undergraduate minors available at North Carolina State University.

Engineering—Industrial Engineering

Forestry and Natural Resources—Recreation Resources Administration

Humanities—Classical Greek

English

French

German

Japanese

Spanish

Social Sciences—Anthropology

AGRICULTURAL INSTITUTE

Admission to this two-year program requires high school graduation and a letter of recommendation. The program does not carry college credit. An Associate of Applied Science degree is awarded. Fields of study are:

Agribusiness Management

Agricultural Equipment Technology

Agricultural Pest Control

Field Crops Technology

Food Processing, Distribution, and Service

General Agriculture

Livestock Management and Technology (Animal Husbandry and Dairy Husbandry Options)
Ornamentals and Landscape Technology
Turfgrass Management

UNDERGRADUATE DEGREES AND DEGREE OPTIONS

Bachelor of:

School of Design

architecture (fifth-year program); environmental design; environmental design in architecture; environmental design in landscape architecture; environmental design in product design; and environmental design in visual design.

School of Humanities and Social Sciences

social work.

Bachelor of Science in:

School of Agriculture and Life Sciences

(Business) agricultural business management

(Science) agricultural economics; animal science; applied sociology (including option in criminal justice); biochemistry; biological and agricultural engineering; biological sciences (including an option in microbiology); botany; conservation; fisheries and wildlife sciences; food science; horticultural science; medical technology; pest management for crop protection; poultry science pre-veterinary option; and zoology (including options in pre-dental and pre-medical).

(Technology) agronomy; animal science; biological and agricultural engineering; food science; horticultural science; and poultry science.

(Individualized Study Program) in agriculture and life sciences.

School of Education

agricultural education; education, general studies; health occupations teacher education; industrial arts education; marketing education for teachers; mathematics education; middle grades education; science education; technical education; and vocational industrial education.

School of Engineering

aerospace engineering; biological and agricultural engineering; chemical engineering; civil engineering; civil engineering, construction option; computer engineering; construction management; electrical engineering; engineering; furniture manufacturing and management; industrial engineering; materials science and engineering; mechanical engineering; and nuclear engineering.

School of Forest Resources

conservation; forestry; pulp and paper science and technology; recreation resources administration; and wood science and technology.

School of Humanities and Social Sciences

economics; English; history; philosophy; and political science.

School of Physical and Mathematical Sciences

chemistry; computer science; geology; mathematics; meteorology; physics; and statistics.

School of Textiles

textile chemistry; textile engineering; textile management; textile science; textiles

Bachelor of Arts in:

School of Education

psychology (including option in human resource development).

School of Humanities and Social Sciences

accounting; business management; economics; English (including options in teacher education and writing-editing); French (including an option in teacher education); history; multi-disciplinary studies in humanities and social sciences; philosophy; political science (including an option in criminal justice); social studies education option (in history, political science, or sociology); sociology (including an option in criminal justice); Spanish (including an option in teacher education); and speech-communication.

School of Physical and Mathematical Sciences

chemistry; geology.

PROFESSIONAL DEGREES

School of Engineering

Chemical Engineer; Civil Engineer; Electrical Engineer; Industrial Engineer; Materials Engineer; Mechanical Engineer; and Nuclear Engineer.

School of Veterinary Medicine

Doctor of Veterinary Medicine

GRADUATE DEGREES

Master of:

agriculture; architecture; biological and agricultural engineering; biomathematics; chemical engineering; chemistry;

civil engineering; computer studies; economics; education; electrical engineering; engineering (off-campus program); forestry; industrial engineering; integrated manufacturing systems engineering; landscape architecture; life sciences; materials science and engineering; mechanical engineering; nuclear engineering; product design; public affairs; recreation resources; sociology; statistics; technology for international development; textiles; toxicology; wildlife biology; and wood and paper science.

Master of Arts in:

archival management; economics; English; history; and political science.

Master of Science in:

adult and community college education; aerospace engineering; agricultural economics; agricultural education; animal science; applied mathematics; biochemistry; biological and agricultural engineering; biomathematics; botany; chemical engineering; chemistry; civil engineering; computer engineering; computer studies; crop science; curriculum and instruction; ecology; educational administration and supervision; electrical engineering; entomology; food science; forestry; genetics; guidance and personnel services; horticultural science; industrial arts education; industrial engineering; management; marine, earth and atmospheric sciences; materials science and engineering; mathematics; mathematics education; mechanical engineering; microbiology; middle grades education; nuclear engineering; nutrition; occupational education; operations research; physics; physiology; plant pathology; poultry science; psychology; recreation resources administration; rural sociology; science education; soil science; special education; statistics; textile chemistry; textiles; toxicology; veterinary medical sciences; vocational industrial education; wildlife biology; wood and paper science; and zoology.

Doctor of Philosophy in:

aerospace engineering; animal science; applied mathematics; biochemistry; biological and agricultural engineering; biomathematics; botany; chemical engineering; chemistry; civil engineering; computer engineering; crop science; economics; electrical engineering; entomology; fiber and polymer science; food science; forestry; genetics; horticultural science; industrial engineering; marine, earth and atmospheric sciences; materials science and engineering; mathematics;

mathematics education; mechanical engineering; microbiology; nuclear engineering; nutrition; operations research; physics; physiology; plant pathology; psychology; science education; sociology; soil science; statistics; toxicology; veterinary medical sciences; wood and paper science; and zoology.

Doctor of Education in:

adult and community college education; curriculum and instruction; educational administration and supervision; guidance and personnel services; industrial arts education; and occupational education.

Consult the Graduate Catalog for further information on graduate programs and admissions procedures.

Arts Studies

North Carolina State University is committed to providing its students with a broad-based education that not only prepares students for a career but also supplies them with aesthetic values that stimulate creative activities and enrich their private lives.

Each year the university provides its students with a wide range of opportunities for exposure to the arts. These include the Friends of the College concert series in Reynolds Coliseum; the professional music, theatre, dance, and film series offered by Stewart Theatre; a series of exhibitions of painting, photography, textiles, and sculpture in the galleries of the University Student Center; and a Musician-in-Residence program which brings an artist to the campus each year for formal and informal performances and interaction with students. A major gallery addition to the University Student Center is being planned.

Opportunities for direct student participation in extracurricular arts activities include many international and choral music organizations, student productions in Thompson Theatre, and craft instruction and facilities in the Crafts Center. These activities are described in more detail under "Student Activities" later in this section of the catalog.

Academic credit as well as aesthetic appreciation and, in many cases, student participation and performance are available through a large number of courses, most of which may be taken to fulfill humanities elective requirements in any undergraduate curriculum. Any of these courses may be taken as free electives. An academic minor program in arts studies is currently being planned.

The courses listed below, according to various categories, are examples of arts courses currently offered. They are described in detail in the "Course Description" section of the catalog under the indicated course prefix.

NOTE: *Courses that involve substantial "hands on" activities are indicated by italics.*

Dance: PE 239, 263, 264

Design: DF 111, 112; DN 141, 142, 212, 234, 242, 311, 312, 316, 354, 411, 414, 441, 443, 444, 445, 447, 448, 454; IA 246, 351

Film:	ENG 375, SP 244, 344
History of Art:	HA 201, 202, 203, 401, 402, 404
Music:	MUS 100, 110, 120, 200, 210, 215, 220, 230, 240, 301, 302, 305, 320
Philosophy of Art:	PHI 306
Theatre:	SP 103, 203, 223, 233, 234, 303, 323, 334, 344

Honors and Scholars Programs

RESIDENTIAL SCHOLARS PROGRAM

Residential Scholars Programs, coordinated between the Division of Student Affairs and the Schools of Agriculture and Life Sciences, Education, Engineering, Forest Resources, Humanities and Social Sciences, Physical and Mathematical Sciences, and Textiles, provide unique co-curricular educational experiences for qualified undergraduates. Students are invited to participate on the basis of selection criteria specific to each school.

Participants are guaranteed housing and are clustered on designated floors of Sullivan Residence Hall. Each program has a weekly forum, during which the students participate in a wide variety of activities, including guest speaker presentations and discussions on issues of contemporary social and educational significance. Extracurricular opportunities are also made available to broaden the cultural and professional horizons of participants. In addition to these activities, there are specific academic expectations defined by the respective schools.

For more information contact the Coordinator for Residential Scholars Programs (102 Sullivan Hall, 737-2353) or the office of the appropriate school dean.

HONORS PROGRAMS

Honors programs are offered by the academic schools. Students who complete an honors program are designated with a prefix "H" on the commencement program and their permanent records indicate honors classes. Honors participants benefit from a more individualized and rigorous approach to their desired degree through special classes, seminars, and individual research.

The Schools of Agriculture and Life Sciences, Humanities and Social Sciences, Forest Resources, Physical and Mathematical Sciences, and Textiles have school-wide honors programs. Information is available from the office of the dean of each of these schools. In the School of Education, the Psychology Department has an honors program.

Students who have achieved an average of 3.0 (B) or better in their first semester, first year, or first two years *may* be eligible for honors programs, but some programs require higher averages. Students who feel they are eligible should take the initiative to learn about honors program opportunities.

Scholarships

UNIVERSITY MERIT AWARDS PROGRAM FOR ENTERING FRESHMEN

N. C. State University offers a competitive scholarship program for entering freshmen to recognize and to encourage exceptional academic ability and achievement. Graduating seniors of good character and leadership potential who have excelled in their high school academic and extracurricular endeavors may apply for a large number of merit award opportunities at the university. Financial need is not a consideration in the selection of recipients for these awards.

Each year the Merit Awards Program conducts a nation-wide competition for approximately 70 university-wide scholarships (available to students entering any academic major) as well as over 125 other scholarships that are offered through individual schools and departments. Completion of the Merit Awards Program application packet, which consists of the student's application as well as transcript and recommendation documents, assures that a student will be considered for all available freshman merit awards. The application packet is available by August preceding the student's senior year in high school, and the application deadline is mid-November of the senior year.

Semifinalists are identified from the entire applicant pool in early January and are invited to North Carolina State University in February for personal interviews. An interview for finalists is conducted in March, after which award recipients are announced in early April.

The **John T. Caldwell Alumni Scholarship**, which is sponsored by the NCSU Alumni Association, is the university's most prestigious award for entering freshmen. At least 25 Caldwell Scholarships valued at \$3000/year (up to \$12,000 for four years) for in-state recipients and \$4500/year (up to \$18,000 for four years) for out-of-state recipients are offered each year. This excellent scholarship seeks students who demonstrate both academic excellence and strong leadership potential.

Yearly renewal of the Caldwell and the other university-wide renewable awards assumes the maintenance of a 3.0 grade point average once a recipient is engaged in full-time coursework at the University.

Many other scholarships ranging from \$1000 for the freshman year up to the Caldwells are available in each year's competition.

Students who rank near the top of their class and who have strong SAT scores should request their Merit Awards application packet from:

Merit Awards Program
North Carolina State University
205 Peele Hall, Box 7302
Raleigh, North Carolina 27695-7302

Phone inquiries are welcome: (919) 737-3671.

UNIVERSITY FACULTY SCHOLARSHIPS FOR JUNIORS AND SENIORS

Rising juniors and seniors who have outstanding records of scholarly achievement, whose college careers have been spent at NCSU (exclusive of summer school and exchange programs), and who have not been awarded a concurrent academic scholarship of over \$2,000 a year are eligible to apply for one-year, renewable University Faculty Scholarships. For the 1987-88 academic year there will be four University Faculty Scholarships, each for \$4,000. The Executive Council of the Academy of Outstanding Teachers will constitute the selection committee. Applications for University Faculty Scholarships to be awarded for the 1987-88 academic year must be submitted by January 15, 1987, to Dr. George T. Barthalmus, Chairperson, Academy of Outstanding Teachers, Box 7617, NCSU Campus (737-2698).

SCHOOL AND DEPARTMENTAL SCHOLARSHIPS FOR CONTINUING STUDENTS

A number of scholarships based upon academic achievement are administered directly through some of the academic departments for students engaged in full-time coursework at the university. See the Schools, Departments, and Programs of Study section later in the catalog. A continuing student should contact the school/department of his or her academic major for information about specific scholarship opportunities that do not require the filing of financial information.

Special Academic Programs

UNIVERSITY UNDESIGNATED FRESHMAN PROGRAM

The University Undesignated Freshman Program allows selected freshmen to explore the university's diverse programs of study for a year before declaring their academic majors. The program is coordinated by members of the Provost's staff, who are responsible for academic advising and other activities designed to help enrolled students make informed decisions in the selection of their major fields.

Current plans call for limiting enrollment in the program to approximately 150 new freshmen per year. Selected students must have shown a strong academic performance in high school and must declare on their application forms that they are undecided about the major field they wish to pursue.

Once enrolled, students are expected to participate fully in the program during their freshman year, after which they will apply for the major field of their choice. While enrolled in the program, students will be placed in the most advanced courses for which they are prepared. These courses are chosen in order to give participating freshmen maximum flexibility in moving into a major field.

University undesignated freshmen will be required to enroll in two special courses during their first year at NCSU. One of these is an orientation course specifically designed to provide a formal vehicle for the exploration of the many

major fields of study at the university. The other is a course designed to stimulate and excite the intellect by exploring a body of thought and by encouraging critical questioning under the guidance of outstanding faculty members.

Students who apply for this program should be prepared for a great deal of adviser contact, counseling, and guidance; frequent meetings with advisers are required.

COOPERATIVE EDUCATION PROGRAM

The Cooperative Education Program is designed to be an integral part of a student's educational program and is offered in all schools. The co-op program enriches and expands classroom learning by providing sponsored work assignments in industry, business and government. Work experience is selected based on its relevance to a student's major and/or career goals and provides for alternating semesters of study and full-time work. This alternating plan is available in all schools. A parallel plan (part-time study and part-time work) is also available except in the Schools of Engineering, and Physical and Mathematical Sciences.

The co-op experience normally takes place during the sophomore and junior years and means that attaining a degree will take more than eight semesters. A grade point average of 2.25 is required for students entering this program (2.50 for students in the School of Physical and Mathematical Sciences). Freshmen are not eligible and transfers must first complete at least one semester at NCSU. Engineering students must have been admitted to a degree program. To remain in the program, students must maintain a cumulative average of 2.00, agree to participate for a minimum of 12 months of work experience or its equivalent, and be registered for each work period with the respective co-op course numbers for their school.

EVENING UNDERGRADUATE DEGREE PROGRAMS

The School of Humanities and Social Sciences offers complete undergraduate degree programs during the evening hours for adult part-time students. Such degree programs are available in the departments of Economics and Business, English, History, Sociology and Anthropology, Foreign Languages and Literatures, and Political Science, as well as in Multi-Disciplinary Studies. Persons interested in more information about these evening degree programs should contact the Coordinator of Evening Programs, School of Humanities and Social Sciences, Box 8101, N.C.S.U., Raleigh, N. C. 27695-8101 (919) 737-2467.

NON-DEGREE CERTIFICATE PROGRAMS

Non-degree certificate programs are prescribed sets of regular academic courses which offer limited but structured continuing education opportunities. They are designed expressly for Lifelong Education Students, and students enrolled in undergraduate or graduate degree programs at NCSU are not eligible to participate simultaneously in these certificate programs. Satisfactory completion of the prescribed courses is recognized by the issuing of a certificate from the department or school that offers that program.

Certificate programs are currently offered by the following academic units: Department of Adult and Community College Education—**Studies in Gerontol-**

ogy; Department of Computer Science—**Computer Programming**; Department of English—**Professional Writing**; Department of Occupational Education—**Trainer Development**; Department of Political Science and Public Administration—**Management Development** (PBS students only) with program areas such as Adult and Community College Administration, Data Management, Financial Management, Human Resources Management, Management Control Systems, and Public Affairs; Department of Speech-Communications—**Human Communication**, with track options in Public Communication, Interpersonal Communication, Organizational Communication and Theater Communication; and the School of Textiles—**Textiles** with subject areas including Apparel Production, Dyeing and Finishing, Fabric Production, Fiber and Polymer Science, Fiber Science for Textile Conservators, Textile Administration, Textile Fundamentals, and Yarn Manufacturing.

For information concerning enrollment requirements and prescribed courses for a particular certificate program, consult the department or school offering that program or the Division of Lifelong Education (737-2265).

METCALF LIVING-LEARNING PROGRAM

The Living-Learning Program in Metcalf Residence Hall is designed primarily for freshmen who are interested in educational and cultural development. The program involves male and female freshmen in all eight schools of the university.

Metcalf students can take several courses together in cluster classes, become informally acquainted with faculty members, hear outside speakers, and participate in planned discussions. Faculty members and graduate students provide tutorials to assist the freshmen with their courses.

COOPERATING RALEIGH COLLEGES

The Cooperating Raleigh Colleges (CRC) is a voluntary organization comprised of North Carolina State University, Meredith College, Peace College, St. Augustine's College, St. Mary's College, and Shaw University for the purpose of developing and conducting cooperative educational activities. The organization provides the opportunity for students to enroll at another institution for a course or courses not offered on their home campus. Other activities include a cooperative library arrangement, joint student activities, and faculty cooperation and interchange.

Any NCSU *undergraduate degree* student who is enrolled in at least eight credit hours on the NCSU campus may take a course at another Raleigh college during a fall or spring semester (except that men may not enroll in courses at Peace College) provided that (a) the course is not taught on the NCSU campus and (b) the adviser and dean consider the course educationally desirable.

Students may not register for more than a total of two courses in any semester at other CRC colleges. Under extenuating circumstances, exceptions for an additional course registration may be approved by the requesting student's school dean.

Home campus students have first priority in class assignment. Courses taken at other institutions may be used as free electives and as alternatives to restricted electives, if so approved by adviser and dean. Credits earned in this

manner may apply toward fulfilling graduation requirements, but grades from other CRC institutions are not used in computing a student's NCSU grade point average. Under this agreement, regular tuition and fees are paid to NCSU. Certain special fees may be required for special courses at other colleges, and the student is responsible for paying such fees. During the summer, there is no interinstitutional program with local colleges. A student desiring to take a summer course must register directly with the institution offering the course.

NOTE: Lifelong Education students may not register for courses through inter-institutional procedure.

NATIONAL STUDENT EXCHANGE PROGRAM

North Carolina State is one of 70 colleges and universities in the United States belonging to the National Student Exchange Program. Each year an opportunity is provided for NCSU students to study at one of the other participating schools and still pay the same tuition and fees they pay here, thus avoiding the red tape normally associated with a change of school. Students returning from exchange reflect an increased feeling of independence, self-reliance and self-confidence, and a better appreciation of home region, family and home campus. A major impact of the exchange year has been an increased awareness and appreciation for the vast differences in ideas and values found in different geographic locations. Eligible students must be an undergraduate with a 2.5 grade point average or better and be selected by a screening committee. Preference is given to North Carolina residents. For further information contact the National Student Exchange Office in 209 Harris Hall.

NORTH CAROLINA STATE FELLOWS PROGRAM

North Carolina State University offers a special learning and development experience known as the North Carolina State Fellows Program. The program is designed to assist outstanding, talented students to develop their leadership potential at an accelerated pace, and to accomplish this in ways not usually afforded by the university. Each year approximately twenty-five new freshmen are selected to participate in the program as Fellows. The program seeks to identify students of exceptional ability and motivation and to encourage their development as potential leaders for business, governmental, educational and other professional communities. The program attempts to fulfill its goal by providing training and developmental opportunities.

International Programs and Activities

INTERNATIONAL STUDENTS

About 1,100 students from approximately 91 countries attend the university and enrich the campus and community. The International Student Office assists these students with immigration and passport matters, currency permits, and medical, personal, and social concerns.

International applicants are carefully screened for evidence of English language proficiency, adequate finances, and academic credentials indicating excellent potential for success. The Lifelong Education Student category is not available to persons on temporary visas. The university has authority to issue Forms I-20 for F-1 visas and forms IAP-66 for J-1 visas to fully qualified individuals.

An orientation program for new international students is conducted during the week preceeding the fall and spring registration.

International students are required to purchase the university student insurance policy or provide proof of agency sponsor coverage. Special courses in English for Foreign Students (FLE) are required for those whose scores on the Test of English as a Foreign Language (TOEFL) are sufficiently high for admission but who need further instruction to perform well academically.

The International Student Committee of the University Student Center sponsors a variety of social and cultural programs for international and American students.

SUMMER INSTITUTE IN ENGLISH FOR SPEAKERS OF OTHER LANGUAGES

The Summer Institute in English for Speakers of Other Languages is a six-week, intensive English language program for students from other countries who intend to pursue university studies or specialized training programs in the United States in the fall. The institute, which is jointly sponsored by the Department of Foreign Languages and Literatures and the Division for Lifelong Education, is held from early July to mid-August each summer. It is designed to provide students with intensive instruction and practice in the use of the English language. Emphasis is on developing fluency in speaking and understanding oral English as well as reading and writing skills.

The institute also offers orientation to American life and institutions to give students insight into life in the U.S. and to help them to adjust to the new environment. There are films, lectures by guest speakers, and field trips on weekends to places of historic, cultural and scenic interest.

Prospective students should have studied English and acquired some facility in the use of the spoken language prior to enrolling in the institute since its curriculum is not designed for beginners.

Admission to the institute does not imply admission as a degree candidate at North Carolina State University or any other campus of the University of North Carolina System.

The TOEFL Test (Test of English as a Foreign Language) is administered to students who wish to take it on the last day of the program. Since this is an institutional administration of the test, scores may not be sent to other institutions but are accepted by the Admissions Office and Graduate School at NCSU.

ALEXANDER INTERNATIONAL PROGRAM

The Alexander International program is a residence hall community for both American and international students. The 190 resident members of the program share the common goal of developing their understanding of different cultures

and countries and developing cross-cultural relationships. The 95 American students and the equal number of international students, representing approximately 40 foreign countries, become more sensitive to the values of different peoples, systems of government, economic structures, and religions. These goals are achieved through informal interactions, social and educational programming, and American and international roommate pairing.

Program activities in past years include both an international dinner and international coffeehouse series, emphasizing customs, foods, and entertainment from various cultures. Workshops on cultural differences, cross-cultural communication and relationships, international employment opportunities, and overseas studies are regularly included in the annual calendar of programs and activities. These activities provide an opportunity for American students to add an international dimension to their education while attending NCSU.

Participation in this international program is selective and based upon potential contributions to the program. Students are expected to be active participants, to initiate programming, and to be supportive of the program goals. Students interested in applying or additional information should inquire at the Programs Office, 105 Alexander International Hall, 737-2925.

STUDY, TRAVEL, AND SHORT-TERM EMPLOYMENT ABROAD

The Study Abroad Office in Alexander International Hall assists students interested in overseas study and travel, short-term employment in foreign countries, and national and international scholarship competitions for study abroad. The staff provides personal and group advising, sponsors program presentations and information sessions, conducts orientation programs, and maintains a resource library.

Many students participate in study abroad programs sponsored by NCSU, other U.S. colleges and universities, U.S. educational institutions, and foreign universities. The Study Abroad Office maintains descriptive literature and directories for over 1,000 individual programs. The staff advisors will assist students in selecting and evaluating various programs, assist in the procedure for approval of academic credit transfer, and suggest basic orientation readings and activities. The resource library materials include information on grant sources and competitions. These include annual competitions such as Fulbright Grants for graduate study, Marshall Scholarships for graduate study in the United Kingdom, Rhodes Scholarships for Oxford University, England, and many programs which award specific country or specific academic curriculum grants for foreign study.

Short-term employment and internship positions in a foreign country are also available. A program sponsored by the Council on International Educational Exchange assists students interested in summer or short-term (3-6 months) employment in Great Britain, France, Ireland, West Germany, New Zealand and Costa Rica. The U.S. Student Travel Service coordinates similar programs in Australia, Austria, Finland, France, Norway, Switzerland, West Germany and Yugoslavia. Both of these programs provide for employment visas and assistance in obtaining short-term employment.

For students interested in summer and vacation period travel, the Study Abroad Office can provide assistance in planning a trip. Information is available concerning passport and visa applications, low cost accommodations, group travel programs, Eurail and other public transportation discount programs, International Student Identity Cards, overseas travel arrangements, and background information on specific countries.

Students interested in discussing study, travel, and short-term employment in other countries should contact the Study Abroad Office located at 105 Alexander International Hall (737-2088).

International Student Exchange Program. North Carolina State University is one of 70 colleges and universities in the United States participating in the International Student Exchange Program. Through ISEP, undergraduate students may attend any of 78 member institutions in Africa, Asia, Australia, Canada, Europe, and Latin America on an exchange student basis for a single academic year. Past NCSU student participants have studied in Western Canada, Australia, Britain, Spain, Ireland, France, Germany, Belgium, and Colombia. The ISEP program opportunities provide flexibility in country site, second language proficiency, academic disciplines, and participating institutions.

North Carolina State students pay a program fee for their year abroad which is based on their regular tuition and fees plus the cost of room and board at North Carolina State for one year. Aside from travel expenses and health coverage, ISEP makes it possible for NCSU students to have a year of study outside the country for the same cost of continuing studies for one year at NCSU. This arrangement also allows students to maintain their eligibility for financial aid. While abroad, ISEP students are entitled to all the benefits and services of regular full-time students at their host institutions. Room and board are provided for the full academic year and an ISEP coordinator on each campus is available to students for assistance with any problem.

To apply to participate in ISEP at NCSU a student should have a cumulative grade point average of at least 2.5 and have already studied at NCSU for two semesters. Applicants must be proficient in the language of instruction at the study sites they choose. A campus selection committee, made up of faculty members, chooses those applicants as North Carolina State's program participants for that particular year. Applicants are not in competition with each other. The ISEP Selection Committee bases its decision on the feasibility of each applicant's proposed course of study, on academic background, application and references. The selection process for each academic year takes place in the fall of the preceding year. Students begin the application process by requesting a copy of the ISEP Directory from the Study Abroad Office, 105 Alexander Hall, 737-2088.

Semester in Santander, Spain. The University of North Carolina at Charlotte and North Carolina State University, in cooperation with the University of Santander, offers a Spring Semester Abroad program in Spain. Undergraduates from both North Carolina institutions, as well as qualified students from other institutions, can spend a semester in the coastal city of Santander, taking classes from Spanish professors in Spanish language, literature, art, and history. Students entering the program will be expected to have completed four semesters of

college Spanish or the equivalent with a grade of C or better. Overall academic average should be at least 2.5. Students may enroll for 12 to 15 hours credit. Further information may be obtained from Dr. Dario A. Cortes, Department of Foreign Languages and Literatures, 126-A 1911 Building (737-2475).

Summer Study at Oxford, England. A cooperative program with the University of North Carolina at Asheville offers North Carolina State University students a four-week summer experience at Oxford, England. The program is limited to 30 participants and students may take one or two courses. Academic transfer credit is granted for this work by NCSU. Courses usually include Shakespeare, British History, Contemporary British Novel, and History of Art. All courses are taught by British scholars. Ample time is made available for independent travel in order to maximize the British experience. Contact the Division of Student Affairs, 210 Harris Hall (737-3151), for full details.

Summer Study in London, England. The School of Humanities and Social Sciences and the Division of Student Affairs offer a four-week summer study program in London. Students live at Canterbury Hall, University of London, and take one or two credit courses in British history or British literature offered by NCSU faculty. The courses are illustrated by group visits to various literary and historical sites in the London area as well as two all-day tours outside of London. Evening sessions include plays, concerts, and lectures by British authorities. Weekends are free for independent travel. For specific details contact the Study Abroad Office, 105 Alexander Hall, 737-2088.

Summer Study in France. The Department of Foreign Languages and Literatures offers a five-week program in intensive French language studies while concentrating on French civilization, mass media, or art. Although not required, students should have at least minimal knowledge of French. Students will be lodged in private homes during their stay. For further details, contact the Department of Foreign Languages and Literatures, 130 1911 Building, 737-2475.

Summer Study in Germany. In cooperation with the University of North Carolina at Charlotte, NCSU offers a month program which includes intensive instruction in the German language (intermediate level) and lectures on German culture and civilization. Instruction is by the Program Director (from UNC-C) and staff of the Institute in Germersheim. The program is open to students with two prior semesters of university level German or equivalent. Contact the Department of Foreign Languages and Literatures, 129 1911 Building, 737-2475 for more details.

Summer Study in Mexico. The Department of Foreign Languages and Literatures sponsors a Language and Culture Summer Study Program in Mexico, through which students can gain up to six academic credits. The program for both beginning and advanced students is designed to foster an oral command of the language and to provide enrichment through a first-hand knowledge of Mexican civilization and culture. Students will visit places of interest in Mexico during a five-day period. In Cuernavaca they will attend classes four hours a day for twenty days and have the opportunity during this time to live with a Mexican family. They will spend the final four days of the program in Acapulco. Further information may be obtained from Dr. Dario A. Cortes, Department of Foreign Languages and Literatures, 126-A 1911 Building (737-2475).

In addition to the study abroad programs described above, NCSU sponsors a bi-annual excavation project in Jordan through the Department of History, and four NCSU schools sponsor semester exchange programs with universities in Europe. The School of Design has an exchange program with the Technische Universiteit Wien in Vienna, Austria. The School of Textiles sponsors a semester exchange program with the Scottish College of Textiles in Galashiels, Scotland; the School of Humanities and Social Science has a one year exchange program with Hiroshima Shudo University in Japan; and the School of Veterinary Medicine has an exchange program with the State University of Utrecht in the Netherlands.

Admissions

The application deadline for the fall semester and summer sessions is May 1; however, students are encouraged to apply during the fall of the senior year in high school, as students will be accepted until the classes have been filled. Applicants for the School of Design should submit applications by January 1. Applications for the spring semester should be submitted prior to November 1.

Each applicant must complete an application form which may be obtained from high school counselors or by writing to:

Director of Admissions
Box 7103
North Carolina State University
Raleigh, North Carolina 27695-7103

A nonrefundable \$25 fee must accompany the completed application.

FRESHMAN ADMISSION

Admission to the university is competitive and, as those programs in high demand are more competitive, it is possible to be admissible to some programs but not to all programs at N.C. State. Applicants are asked to indicate their first and second choices for a curriculum, including undeclared majors within a school, or to indicate their choice of participating in the University Undesignated Freshman Program. Applications which are not admissible in the first curriculum choice will be reviewed for admissibility in the second curriculum choice.

The admissions decision is based on the completion of the minimum entrance requirements set forth below and on the evaluation of the high school record, including courses taken, the overall grade point average, rank in class and the Scholastic Aptitude Test. These factors are reviewed with the curriculum choice to determine the likelihood of success as a freshman at N.C. State.

In addition to a high school diploma or its equivalent, the following high school courses are the minimum entrance requirements set for students entering N.C. State.

English—4 years
History—2 years

Mathematics—2 years of algebra; 1 year of geometry; advanced algebra and trigonometry are strongly recommended for programs in biological sciences, engineering, forest resources, and physical and mathematical sciences.

Science—2 years, preferably biology, chemistry, or physics

Foreign Language—2 years recommended for School of Humanities and Social Sciences only

The Board of Governors of The University of North Carolina System has determined that, beginning with the 1988 fall semester, the minimum undergraduate admissions requirements for all constituent institutions, including North Carolina State University, shall be:

- A high school diploma or its equivalent
- English - four (4) course units in English, emphasizing grammar, composition, and literature
- Mathematics—three (3) course units in mathematics, including algebra I, algebra II, and geometry, or a higher level mathematics course for which algebra II is a prerequisite
- Social Studies - two (2) course units in social studies, including one (1) unit in U.S. history
- Science - three (3) course units in science, including at least one (1) unit in a life or biological science; at least one (1) unit in a physical science (for example, physical science, chemistry, physics), and at least one (1) laboratory course.
- In addition, it is recommended that prospective students complete at least two (2) course units in one foreign language, and take one (1) foreign language course unit and one (1) mathematics course unit in the twelfth grade.

Any additional entrance requirements for admission to North Carolina State University will be set forth in the Freshman Admissions Bulletin for that year.

Applicants are accepted on either junior or senior test scores, although senior scores are recommended, especially if the applicant is also applying for financial aid. An interview is not required and does not weigh in the admissions decision; a prospective student is always welcome to visit the Admissions Office, 112 Peele Hall. The Admissions Office conducts group information sessions every Monday, Wednesday and Friday at 10:30 a.m. and on Tuesday and Thursday at 1:30 p.m. Campus tours led by students are conducted each weekday, weather permitting, at 12:00 noon, starting at the Memorial Bell Tower.

Two-Year Agricultural Institute

Requirements for admission to the Agricultural Institute, a two-year terminal program, include graduation from an accredited high school or successful completion of the high school equivalency examination administered by the State Department of Public Instruction. The application should include either a copy of the high school record or a letter indicating the applicant has passed the equivalency examination and a letter of recommendation. Each application is reviewed and evaluated by the Institute Director. SAT scores are not required. Course work is not transferable into the four-year degree programs.

Scholastic Aptitude Test

Applicants for admission as freshmen must take the College Entrance Examination Board Scholastic Aptitude Test (SAT) and request that their scores be sent directly from the Board to North Carolina State University (Code No.—R5496). Information booklets and application forms may be obtained from school counselors or by writing:

College Entrance Examination Board
Box 592
Princeton, New Jersey 08540

Achievement Tests

Achievement Test scores are not used in the admissions decision; however, freshmen who take the English and Math Level I Achievement Tests will receive more accurate placement in the beginning English and math courses. The fall and winter test dates are considered the best time for taking these tests.

Advanced Placement

A student may qualify for advanced placement by one or more of the following means: 1) by passing a proficiency examination administered by a teaching department; 2) by attaining a sufficient predicted grade in English (PGE) which is based on the SAT Verbal score and the high school record, including grade point average and class rank; 3) by attaining a sufficient score on the mathematics placement exam which is administered during Freshman Orientation the summer preceding the freshman year; 4) by meeting a specific minimum score on certain of the CEEB Advanced Placement Program (APP) examinations; and 5) by attaining at least a minimum score on certain of the College Level Examination Program (CLEP) subject tests.

OUT-OF-STATE STUDENTS

Undergraduate applicants from outside North Carolina may be required to meet higher standards for admission than N. C. residents in some fields of study. North Carolina State University is limited to accepting not more than 15 percent of total undergraduate admissions from outside the State.

TRANSFER STUDENTS

North Carolina State University welcomes transfer applicants, and in recent years, more than 25 percent of our graduates started their college programs at other institutions.

A transfer student should present at least 28 semester hours of satisfactory (C or better) college-level work with a minimum overall 2.0 (C) average on all college work attempted and be eligible to return to the last institution regularly attended. *Programs that are experiencing space limitations require a higher minimum grade point average for admission.* Students presenting fewer than 28 semester hours must also meet the admissions requirements for entering freshmen by having the high school record and SAT scores submitted. Individual

official transcripts must be submitted from each institution attended. The college credits must have been earned at a regionally accredited institution and should include a college-level math or the high school record must be submitted to show proper background. Applications of students from non-regionally accredited institutions will be reviewed by the Admissions Committee.

Applications from technical institutes, technical colleges, and technical programs at community colleges are evaluated on an individual basis. Credits from such programs are generally not considered for automatic transfer, but qualified students who are otherwise admissible may receive transfer credit by prescribed procedures. These procedures include credit by examination and/or validation by the appropriate subject matter academic unit on the North Carolina State University campus.

Once applicants have been accepted and have indicated their intention to enroll, their transcripts are evaluated by the school to which application is made to determine the exact amount of credit applicable toward a degree at North Carolina State. A grade of C or better is required before a course may be considered for credit. *Transcripts are not evaluated until applicant has been admitted.* International students are carefully screened for evidence of English language proficiency, adequate financial backing and academic credential indicating potential for success.

UNCLASSIFIED STUDENTS

Unclassified students are those working for college credit but not enrolled in a degree-granting program. Admission as an unclassified student requires the recommendation of the dean of the school in which the student wishes to enroll. Unclassified students must meet the same entrance requirements as regular degree students and must meet the same academic requirement to continue. If, at a later date, unclassified students wish to change to regular status, their credits will be evaluated in terms of the requirements of their intended curriculum.

LIFELONG EDUCATION STUDENTS

The Lifelong Education Student classification is designed for residents of the Triangle area who are interested in taking college courses, but who do not desire to work toward a degree at North Carolina State University. Lifelong Education Students are limited to a maximum of two courses each semester or summer session.

Lifelong Education Student applications should be made through the Division for Lifelong Education, at the McKimmon Center, corner of Western Boulevard and Gorman Street. If Lifelong Education Students wish to become degree candidates at a later date, they must make application through the Admissions Office. Lifelong Education Students who are considering a degree program are encouraged to make an appointment with the Admissions Office to discuss entrance requirements.

SERVICEMEN'S OPPORTUNITY COLLEGES

NCSU has been designated as a member of the Servicemen's Opportunity Colleges (SOC) General Registry—a network of institutions sponsored by the

American Association of State Colleges and Universities and the American Association of Community and Junior Colleges. Servicemen are encouraged to take college level courses offered by accredited institutions and made available to military personnel through SOC. Records are evaluated, files are retained, counseling is provided, and recognition is given for learning through noninstitutional sources when appropriate. Transcripts must be sent to the Director of Admissions directly from the institution offering the course.

COLLEGE LEVEL EXAMINATION PROGRAM

CLEP primarily serves non-traditional students who have acquired knowledge through university extension courses, educational television, non-credit adult education programs, on-the-job training, and independent study by enabling them to demonstrate their knowledge and receive college credit on the basis of examinations, as well as providing measures of college equivalency for use by business, industry, and organizations other than institutions of higher learning.

There are two types of examinations. *The General Examinations* are designed to provide a comprehensive measure of undergraduate achievement in five basic areas (English composition, mathematics, natural sciences, humanities, social sciences-history). NCSU makes very limited use of this portion of CLEP. The main source of CLEP credit at NCSU stems from the *Subject Examinations* which are designed to measure achievement in specified undergraduate courses. The examinations are given at NCSU during the third calendar week of each month except February and December. Candidates who plan to take the examinations should register three weeks before the test date.

For further information write or telephone the Counseling Center, North Carolina State University, Box 7312, 200 Harris Hall, Raleigh, N.C. 27695-7312; (919) 737-2423.

GRADUATE STUDENTS

Procedures and policies governing graduate admission are outlined in a separate catalog issued by the Graduate School. For a copy of the Graduate School catalog write:

Dean of the Graduate School
104 Peele Hall
Box 7102
North Carolina State University
Raleigh, North Carolina 27695-7102

Orientation

The University provides a series of orientation programs for all new freshmen during the summer. Students attend their program with other freshmen who have been admitted to the same school or to the University Undesignated Program. Meetings and conferences with faculty and student leaders acquaint new students with the academic opportunities and expectations associated with their

chosen curriculum and with the extracurricular activities and organizations available on campus. Each orientation program includes the placement testing and preregistration for fall classes, and current undergraduate catalogs are distributed. A late orientation is provided (by permission only) just before the beginning of the fall semester for those unable to attend the summer program.

For more information, contact the Department of Student Development, 214 Harris Hall (737-2443).

REQUIRED IMMUNIZATION DOCUMENTATION

North Carolina state law requires all new enrollees in the university system to present proof of immunization prior to completion of registration.

Verified proof of immunization against rubella, measles, tetanus and diphtheria must be presented to the University Student Health Service no later than 30 days prior to registration.

If this requirement is not met, dismissal from school is mandatory under the law. For assistance, contact the Student Health Service (919) 737-2563.

Registration

PREREGISTRATION

Preregistration is a procedure whereby students meet with their advisers to discuss their academic program and to select courses for the next semester. The courses selected by each student are processed through the computer which assigns a day and an hour for each course requested. A *Schedule of Classes* is available for every semester prior to the preregistration period. This contains all necessary instructions for completing preregistration. To be preregistered, students must submit a Preregistration Schedule Request Form signed by their faculty adviser to the Department of Registration and Records during the specified preregistration period.

REGISTRATION

Registration consists of three steps: (1) preregister by the established deadlines; (2) pay tuition and fees and all other debts to the university by the established deadlines; and (3) obtain a class schedule and registration card. All students who complete steps 1 and 2 will receive their class schedule and registration card by mail prior to Registration/Change Day. Students who register after Registration/Change Day must follow late registration instructions and pay the required late fees. Instructions for completing registration and late registration are issued each semester and summer session.

Class schedules not mailed because of an outstanding account will be cancelled. For more information, contact the Department of Registration and Records, 100 Harris Hall, 737-2572.

INTERINSTITUTIONAL REGISTRATION

A regularly enrolled undergraduate degree student who is enrolled in at least eight credit hours at North Carolina State University may take, under certain conditions, course work at one of the Raleigh colleges, at the University of North Carolina at Chapel Hill, at the University of North Carolina at Greensboro or at Duke University. Interinstitutional registration forms and all registration procedures are available from Registration and Records.

SCHEDULE CHANGES—DROPS AND ADDS

Courses may be added during the first week of a regular semester and during the second week with the permission of the instructor. All courses may be dropped without regard to course load during the first two weeks of a regular semester. During the third and fourth weeks of a semester, full-time undergraduate students who wish to drop courses at any level and whose academic load would thereby fall below the twelve-hour minimum course load may do so only for documented medical reasons or other verified, unforeseen grounds of personal or family hardship.

For undergraduate students exceptions to the drop policies require the recommendation of a student's adviser (or the departmental coordinator of advising or the department head) and approval by the dean of the student's school. Students who wish to drop all courses for which they are enrolled, must withdraw from the university for the remainder of the semester or summer term in which they are enrolled.

Tuition and Fees

North Carolina Resident—\$426.00 per semester (\$240 tuition plus \$186 fees).
Nonresident—\$2,096.00 per semester (\$1,910 tuition plus \$186 fees).

A statement of tuition and fees is mailed to each preregistered student 30-40 days before the beginning of any term. The statement must be returned with full payment or complete financial assistance information by the due date appearing on the statement. Normally the due date is ten days before classes begin. Non-preregistered students are required to pay their tuition and fees at registration. Fees are the same for both residents and nonresidents and are required of all students. Nonresident students are required to pay an additional \$1,670 per semester for tuition.

ESTIMATED ANNUAL UNDERGRADUATE EXPENSES

<i>Tuition and Fees</i>	<i>First Semester</i>	<i>Second Semester</i>	<i>Year</i>
(a) N.C. Residents	\$ 426.00	\$ 426.00	\$ 852.00
(b) Out-of-State Residents	2,096.00	2,096.00	4,192.00
Room Rent	617.00	617.00	1,234.00
Meals	725.00	725.00	1,450.00
Books and Supplies	225.00	225.00	450.00
Other personal expenses	400.00	400.00	800.00
TOTAL			
(a) N.C. Residents	\$2,393.00	\$2,393.00	\$4,786.00
(b) Out-of-State Residents	\$4,063.00	\$4,063.00	\$8,126.00

NOTE: All charges are subject to change without notice.

EXPENSES OTHER THAN TUITION AND GENERAL FEES

Application Fee: A non-refundable fee of \$25 must accompany each application for admission. Transfer students must pay an additional \$2 (\$27 total) as a transcript evaluation fee.

Room Rent: New incoming students receive room reservation instructions in the letter of acceptance. Continuing students are provided a card with instructions at their residence hall rooms. The 1986-87 charge for room rent ranged from \$588 per semester for most residence halls to \$767 for North Hall and \$851 for South Hall.

Meals: During their first academic year, new freshmen electing to reside on-campus are required to participate in one of the university's available meal plans. Meal plan costs in 1986-87 ranged from \$595 to \$700. Other students pay for meals individually at the various dining facilities available both on and near the campus.

Books and Supplies: Books and supplies are usually purchased during the first week of classes directly from the Students Supply Stores. Allow approximately \$225 per semester for purchasing books and supplies.

Personal Expenses: Personal expenses vary widely among students but the estimate of \$400 is based on what students report that they spend on these items.

Administrative Management Fee: A special administrative management fee of \$200 per semester and \$100 per summer session is required from a contracting agency sponsoring international students whose programs are coordinated through the University's Office of International Visitors.

Cooperative Education Program Fee: Required of all participating co-op students for each semester in which they are enrolled in an off-campus work assignment. This fee, set at \$115 for the 1986 fall semester, the 1987 spring semester, or the combined 1987 summer sessions, is used for partial support of the Cooperative Education Program staff in job development and placement activities. Students paying this fee are entitled to all university services, facilities, and programs during the semester or combined summer sessions for which they are enrolled.

Fees Related to Laboratory and Computer Courses: Students enrolled in designated lab or computer courses must pay a course fee of \$15 to offset partially the cost of necessary supplies, equipment, and operation. The maximum course fee to be charged to any student will be \$30 per semester or summer session regardless of the number of designated courses taken. These fees will be assessed for courses carried *at the end of the official enrollment period*, i.e., the end of the second week of a semester or the end of the fourth class day during a summer session.

Departments may waive a course fee when: students are auditing a designated course in which the conditions of the audit preclude any usage of lab or computing resources; or students in special projects, independent research, and similar courses which have a designated fee, are not using a university lab course but who mistakenly are registered for the lab section; or students are taking only the lecture portion of a designated lab course but are mistakenly registered for the lab section.

Departments may *not* waive a course fee when: a designated lab or computer fee course is dropped *after the official enrollment date*, or withdrawal from the university occurs *after the official enrollment date*, or state law or policy allows for a waiver of tuition (i.e., faculty/staff, over 65 years of age, exchange programs, etc.)

Students who withdraw from the university *after the official enrollment date* may petition the Fee Appeals Committee, and refunds of course fees will be handled on a prorated basis as are refunds of other fees.

NOTE: *All charges are subject to change without notice.*

REQUIRED FEES

Required fees are levied for services, facilities, and programs available to all students whether or not the student takes advantage of them. Students are assessed fees based on the course load they are taking. An itemization of required fees and other detailed information concerning expenses or related data can be obtained by contacting the University Cashier and Student Accounts Office, Box 7213, Raleigh, North Carolina 27695-7213 (919-737-2986).

REFUND POLICY

A student who officially withdraws from school during the first two weeks of classes will receive a tuition and fees refund of the full amount paid less a registration fee. The withheld registration fee amounts to \$15 the first week and \$25 the second week. After the two-week period, no refunds will be made.

In some instances, circumstances justify the waiving of rules regarding refunds. An example might be withdrawal because of sickness. Students have the privilege of appeal to the Fee Appeals Committee when they believe special consideration is merited. Applications for such appeals may be obtained from the University Cashier and Student Accounts Office, 2 Peele Hall.

RESIDENCE STATUS FOR TUITION PURPOSES

The basis for determining the appropriate tuition charge rests upon whether a student is a resident or a nonresident for tuition purposes. Each student must make a statement as to the length of his or her residence in North Carolina, with assessment by the institution of that statement to be conditioned by the following.

Residence. To qualify as a resident for tuition purposes, a person must become a legal resident and remain a legal resident for at least twelve months immediately prior to classification. Thus, there is a distinction between legal residence and residence for tuition purposes. Furthermore, twelve months legal residence means more than simple abode in North Carolina. In particular, it means maintaining a domicile (permanent home of indefinite duration) as opposed to "maintaining a mere temporary residence or abode incident to enrollment in an institution of higher education." The burden of establishing facts which justify classification of a student as a resident entitled to in-state tuition rates is on the applicant for such classification, who must show his or her entitlement by the preponderance (the greater part) of the residency information.

Initiative. Being classified a resident for tuition purposes is contingent on the student's seeking such status and providing all information that the institution may require in making the determination.

Parents' Domicile. If an individual, irrespective of age, has living parent(s) or court-appointed guardian of the person, the domicile of such parent(s) or guardian is, *prima facie*, the domicile of the individual; but this *prima facie* evidence of the individual's domicile may or may not be sustained by other information. Further, nondomiciliary status of parents is not deemed *prima facie* evidence of the applicant child's status if the applicant has lived (though not necessarily legally resided) in North Carolina for the five years preceding enrollment or re-registration.

Effect of Marriage. Marriage alone does not prevent a person from becoming or continuing to be a resident for tuition purposes, nor does marriage in any circumstance insure that a person will become or continue to be a resident for tuition purposes. Marriage and the legal residence of one's spouse are, however, relevant information in determining residency intent. Furthermore, if both a husband and his wife are legal residents of North Carolina and if one of them has been a legal resident longer than the other, then the longer duration may be claimed by either spouse in meeting the twelve-month requirement of in-state tuition status.

Military Personnel. A North Carolinian who serves outside the state in the armed forces does not lose North Carolina domicile simply by reason of such service. Students from the military may prove retention or establishment of residence by reference, as in other cases, to residency acts accompanied by residency intent.

Active military personnel assigned to North Carolina and their military dependents may be eligible to receive the benefit of the in-state tuition rate under G.S. 116-143.3. A student who qualifies for the in-state tuition rate solely under this statute is not considered a resident but merely eligible for the benefit of the in-state tuition rate. Application for eligibility to be charged the in-state tuition rate under G.S. 116-143.3 must be made prior to initial enrollment or re-enrollment for which the student claims the benefit. Further, application for

such eligibility must similarly be made prior to the outset of each successive academic year of enrollment. Appropriate applications for the benefit of the in-state tuition rate are available in the Office of Undergraduate Admissions, 112 Peele Hall.

Grace Period. If a person (1) has been a bona fide legal resident, (2) has consequently been classified a resident for tuition purposes, and (3) has subsequently lost North Carolina legal residence while enrolled at a public institution of higher education, that person may continue to enjoy the in-state tuition rate for a grace period of twelve months measured from the date on which North Carolina legal residence was lost. If the twelve months ends during an academic term for which the person is enrolled at a state institution of higher education, the grace period extends, in addition, to the end of that term. The fact of marriage to one who continues domiciled outside North Carolina does not by itself cause loss of legal residence, marking the beginning of the grace period.

Minors. Minors (persons under 18 years of age) usually have the domicile of their parents, but certain special cases are recognized by the residence classification statute in determining residence for tuition purposes.

(a) If a minor's parents live apart, the minor's domicile is deemed to be North Carolina for the time period(s) that either parent, as a North Carolina legal resident, may claim and does claim the minor as a tax dependent, even if other law or judicial act assigns the minor's domicile outside North Carolina. A minor thus deemed to be a legal resident will not, upon achieving majority before enrolling at an institution of higher education, lose North Carolina legal residence if that person (1) upon becoming an adult "acts, to the extent that the person's degree of actual emancipation permits, in a manner consistent with bona fide legal residence in North Carolina" and (2) "begins enrollment at an institution of higher education not later than the fall academic term next following completion of education prerequisite to admission at such institution."

(b) If a minor has lived for five or more consecutive years with relatives (other than parents) who are domiciled in North Carolina and if the relatives have functioned during this time as if they were personal guardians, the minor will be deemed a resident for tuition purposes for an enrolled term commencing immediately after at least five years in which these circumstances have existed. If under this consideration a minor is deemed to be a resident for tuition purposes immediately prior to his or her eighteenth birthday, that person on achieving majority will be deemed a legal resident of North Carolina of at least 12 months duration. This provision acts to confer in-state tuition status even in the face of other provisions of law to the contrary; however, a person deemed a resident of 12 months duration pursuant to this provision continues to be a legal resident of the state only so long as he or she does not abandon North Carolina domicile.

Lost but Regained Domicile. If a student ceases enrollment at or graduates from an institution of higher education while classified a resident for tuition purposes and then both abandons and reacquires North Carolina domicile within a 12-month period, that person, if he or she continues to maintain the required domicile into re-enrollment at an institution of higher education, may re-enroll at the in-state tuition rate without having to meet the usual 12-month duration requirement. However, any one person may receive the benefit of this provision only once.

Change of Status. A student admitted to initial enrollment in an institution (or permitted to re-enroll following an absence from the institutional program which involved a formal withdrawal from enrollment) must be classified by the admitting institution either as a resident or as a nonresident for tuition purposes prior to actual enrollment. A residence status classification once assigned (and finalized pursuant to any appeal properly taken) may be changed thereafter (with corresponding change in billing rates) only at intervals corresponding with the established primary divisions of the academic year.

Transfer Students. When a student transfers from one North Carolina public institution of higher education to another, he or she is treated as a new student by the institution to which he or she is transferring and must be assigned an initial residence status classification for tuition purposes.

Prevailing North Carolina Law. General Statute (G.S.) 116-143.1 is the prevailing statute governing residence status classification. Copies of the applicable law and of the implementing regulations are available for inspection in the Office of Undergraduate Admissions, 112 Peele Hall.

Financial Aid

To be considered for assistance by the Financial Aid Office, a student and his or her parents must complete and return for calculation purposes the Financial Aid Form (FAF). The form is available from both high school guidance counselors and from the N. C. State University Financial Aid Office. All *undergraduate applicants for financial aid must* indicate on the FAF that they wish consideration for the Pell Grant. This is done automatically—at no additional charge—if the appropriate Pell Grant items are marked on the FAF. The FAF should be completed preferably by March 1 of the year prior to fall semester enrollment and no later than October 1 of the year prior to spring semester enrollment. Transfers and continuing students should check with the Financial Aid Office regarding any other information which may be needed for aid consideration. North Carolina residents with substantial need should apply for the N. C. Student Incentive Grant by listing College Foundation, Inc., to receive a copy of the FAF. Information about this program is available from the high school counselors, from the Financial Aid Office, and from College Foundation, Inc. (1307 Glenwood Ave., Raleigh, N.C. 27605) administrators of the program.

Awards are made to applicants on the basis of financial need, satisfactory academic progress, and timely submission of the FAF to Princeton, N.J. Determination of a student's need is based on estimated educational costs and a consideration of the family's financial strength, which primarily includes consideration of the family's income as well as the student's summer savings, size of family, number of children in post-high school institutions, family asset holdings and debts, and other resources that may be available for use such as veterans' benefits, Vocational Rehabilitation assistance, etc.

Aid is available on a non-discriminatory basis to all qualifying students. These awards are usually offered in financial aid "packages" which consist of a combination of scholarship or grant, loan, and/or a work-study award, depending upon

the degree of need. Continuing students must have a satisfactory record of academic progress in order to renew their aid, and a new application must be submitted each year for continued aid.

NEED-BASED SCHOLARSHIPS FOR FRESHMEN AND CONTINUING STUDENTS

There are a large number of special scholarships which are based upon both demonstrated financial need and academic achievement. These scholarships are administered by the university's Financial Aid Office as well as by various academic departments on campus. Some of these scholarships have curricular, geographic and other restrictions. A list of these scholarships and the specific criteria which may apply to them may be found in a brochure published by the N. C. State Financial Aid Office. Filing the Financial Aid Form by early March will assure that the student is considered for all need-based scholarships for which he/she is eligible.

GRANTS

Pell Grants (formerly Basic Educational Opportunity Grants). All applicants for financial aid who have never received a bachelor's degree must apply for this program. Eligibility for a Pell Grant is determined by the Federal Government.

Supplemental Educational Opportunity Grants. These grants are made from federal funds to undergraduate students from low-income families. They are especially useful in assisting promising students who demonstrate need. These grants are determined by the University Financial Aid Office.

Minority Presence Grants. Under the Board of Governors' general Minority Presence Grant Program, black students may be eligible for special financial assistance if they are residents of North Carolina, enrolled for at least three hours of degree-credit coursework, and demonstrate financial need.

The N. C. Student Incentive Grant. This program provides grants to legal residents of North Carolina with substantial need. Entering freshmen and students who have received the grant before have priority for future grants. Grants range up to \$1,500 per academic year.

ATHLETIC GRANTS-IN-AID

Athletic awards are made by the Department of Athletics to students who meet the established qualifications for such awards. These awards are based upon athletic ability, rather than upon need.

LOANS

National Direct Student Loans. Both undergraduate and graduate students carrying at least half-time academic loads may be awarded these long-term, low-interest loans. These loans are need-based. Six months after ceasing to be enrolled at least half-time, a student must begin paying interest on his or her loan at 5% per year as well as assuming a \$30 per month minimum repayment

obligation. In order to establish a repayment schedule, borrowers are expected to have exit interviews at the Student Accounts Office in Room 2 Peele Hall just prior to graduation or other termination of studies.

Institutional Loans. A limited amount of other long-term loan money is available in several funds, and loans made therefrom are on essentially the same liberal terms as the National Direct Student Loans.

Guaranteed Student Loans. These federal loans, provided through banks and private lenders in the various states, are often more liberally approved than other need-based federal assistance, but a special needs test must be submitted. If the family's Adjusted Gross Income is less than \$30,000, a student may be considered for a Guaranteed Loan. If the Adjusted Gross Income *exceeds* \$30,000, a student may still be eligible under the needs analysis calculation. Interest is at 7%-9% per year with the federal government paying the interest during the in-school period. In North Carolina, College Foundation, Inc., (1307 Glenwood Ave., Raleigh, N.C. 27605) administers the program. Information is available in the Financial Aid Office.

Emergency Short-Term Loans. These loans are available in small amounts (usually not exceeding \$100) to enable any full-time enrolled student with a previous good repayment record to meet unexpected expenses. These loans are usually to be repaid within 30 days and are not extended beyond the end of a term or graduation.

COLLEGE WORK-STUDY PROGRAM

The federally supported College Work-Study Program provides jobs on campus for students who qualify with need in the same manner as is required for scholarship or long-term loan assistance. Though individual pay rates vary with the job, basic hourly pay rates comply with the current minimum wage requirements.

STUDENT EMPLOYMENT SERVICE

The Financial Aid Office coordinates an employment service to assist students with information about the possibilities for part-time or summer work. No particular academic or economic qualifications are required to obtain jobs on- or off-campus outside the College Work-Study Program. A current listing of job openings is maintained at the Financial Aid Office.

A brochure which gives a detailed explanation of the need-based aid application and award process and the types of aid available may be obtained upon request from the Financial Aid Office, 213 Peele Hall.

Student Housing

North Carolina State University furnishes housing for approximately 7,225 students. The university operates residence halls which house 4,028 men and 2,326 women students. In addition, 300 apartments are available for married students in E. S. King Village, and 15 university-owned fraternity and sorority houses accommodate 570 students.

RESIDENCE HALLS

The residence halls are operated to provide opportunities through a variety of group living experiences which complement and expand the residents' educational experiences. Each hall is staffed with selected students, both graduate and undergraduate, who report directly to professionally trained people in their area and to the Director of Housing and Residence Life. Staff members are available to help students initiate programs and activities and to advise and assist residents in any way possible.

Living arrangements in buildings vary. Six high-rise buildings are arranged in suites of four or five rooms that share a bath; the other buildings have a center corridor with rooms opening on to it. Rooms are furnished but residents must provide bed linen, pillows and towels.

To be eligible for university housing one must enroll as a regular full-time student (an undergraduate must carry a minimum of 12 credit hours per semester).

Room Rentals and Reservations. The rental payment for 1986-87 was \$588 per semester for main-campus double rooms; this rate is subject to change on a year to year basis.

Refund of Room Rent. Cancellation of housing applications must be made *in writing* as follows:

- a. In person at the Housing Assignments Office, Department of Housing and Residence Life, 201 Harris Hall, Monday through Friday between 8 a.m. and 5 p.m.; or
- b. mail addressed to the Housing Assignments Office, Department of Housing and Residence Life, Box 7315, NCSU, Raleigh, NC 27695-7315.

The effective date of cancellation is the date notification is received by the Housing Assignments Office or the date the room is vacated, whichever is later. Cancellation notices received on or before May 1 for the fall semester and January 2 for the spring semester will be eligible for a refund of the fee paid less an administrative processing fee.

HOUSING FOR MARRIED STUDENTS

The University operates 300 apartments in E. S. King Village for married students. The 1986-1987 rental is \$200 for a studio, \$192 for a one-bedroom, and \$213 for a two-bedroom including water only (gas is included in studio units). This rate is subject to change on a year to year basis. Information on availability and applications should be requested from E. S. King Village Office, Department of Housing and Residence Life, Box 7315, Raleigh, N.C. 27695-7315.

OFF-CAMPUS HOUSING

Raleigh has a variety of privately owned apartments and houses available for rent to university students. A partial listing is located in the Off-Campus Housing Office, 201 Harris Hall. No listing is published because of the rapid turnover.

The university does not operate a trailer parking area; however, privately owned parks are available within a reasonable distance of the campus.

FRATERNITIES AND SORORITIES

Twenty-one of the 24 fraternities and four of the six social sororities chartered at the university maintain chapter houses. Twelve of the fraternities and two of the sororities are housed on Fraternity Court, a university-owned project; the remaining fraternities and sororities are located throughout the immediate community.

Rental fees vary in fraternity and sorority houses depending on the individual chapter, but are approximately the same as the residence hall rates.

Academic Policies and Procedures

ACADEMIC ADVISING

Every regularly enrolled student is assigned for academic advising to a faculty member who is normally a member of the department which is, or is most likely to become, the student's major department.

Responsibilities of the Student

Students have the primary responsibility for planning their individual programs and meeting graduation requirements. This involves: (1) keeping up-to-date with university, school, and departmental curricular requirements through materials available from the faculty advisers or departmental coordinator of advising; (2) keeping informed of academic deadlines and changes in academic policies as printed in the *Student Affairs Bulletin*; and (3) consulting with the faculty adviser or departmental coordinator of advising during each preregistration period, following notification of academic warning status, and at other times as needed.

Responsibilities of the Faculty Adviser

Although students have the primary responsibility for planning the programs, faculty advisers are expected to: (1) be available for conferences at appropriate times and places about which their advisees have been informed; (2) provide accurate information about academic regulations and procedures, course prerequisites, and graduation requirements; (3) assist students in planning academic programs suited to their interests and abilities and their career objectives; (4) inform their advisees (a) that faculty advisers' signatures on Preregistration Forms during preregistration or Schedule Revision Forms during the applicable drop period indicate only that they have been consulted and have discussed with their adviser appropriate course choices in fulfilling curriculum requirements as well as possible consequences of various alternative course choices, and (b) that advisers do not have authority to block their advisees' course selections by refusing to sign the forms *except when their advisees' proposed course selections conflict with university academic or curricular regulations*; (5) consider requests from their advisees for signatures of approval for such things as exceptions to the

course drop deadlines, auditing a course before or after taking it for credit, taking a course under the credit by examination policy, registering for 19 or more credit hours, registering for CRC interinstitutional courses, or repeating a course previously passed; (6) refer their advisees for special testing or counseling as needed; (7) assist their advisees in considering the appropriateness of academic adjustments where these become necessary in cases of serious injury or illness.

Responsibilities of the Coordinator of Advising

Each school or department has a coordinator of advising who is responsible for: (1) assigning, training, and supervising faculty advisers; (2) providing up-to-date, printed course and curriculum information for advisers and students; (3) reassigning to another adviser any student who so requests; and (4) assisting any student who wants to major in the coordinator’s area of study but is ineligible at the time to transfer into it. Students in this category keep their adviser in the department in which they are enrolled but consult additionally with the coordinator of advising for the department offering the curriculum in which they wish to enroll. Whenever appropriate, the coordinator will advise students that they should consider alternative curricula.

CLASSIFICATION OF STUDENTS

Regular undergraduate degree students are classified at the beginning of each semester and summer session. The required number of hours of each classification is:

<i>Classification</i>	<i>Semester Hours of Earned Credit</i>
Freshman (FR)	Fewer than 28
Sophomore (SO)	28 or more, but fewer than 60
Junior (JR)	60 or more, but fewer than 92
Senior (SR)	92 or more

Agricultural Institute students are designated as first (01) year if they have earned fewer than 28 semester credits and second (02) year if they have earned 28 or more semester credits.

Unclassified Students (UN) are those working for college credit but not enrolled in a degree-granting program. Admission as an unclassified student requires the recommendation of the dean of the school in which the student wishes to enroll. Unclassified students must meet the same entrance requirements as regular degree students and must meet the same academic requirements to continue. If, at a later date, unclassified students wish to change to regular degree status, their credits will be evaluated in terms of the requirements of their intended curriculum.

Undergraduate Studies (UGS) is the classification used for U. S. citizens who have not obtained a baccalaureate degree and who wish to take courses but who are not currently admitted to a degree program. This classification is not open to foreign nationals with the exception of the spouse of a regularly enrolled NCSU student. To be eligible to register as an undergraduate studies student, persons should: (a) have acquired a high school diploma or a GED certificate; and (b) not have been suspended from any college or university (including NCSU) within the

last three years; and (c) not be degree candidates at NCSU. Also eligible are high school students who have been recommended by their school and approved by the Admissions Office to take lower level courses.

Visiting students during the summer sessions and visiting international students during the regular semesters are classified UGS, but they are exempt from the criteria itemized above. The academic standards applicable to undergraduate degree candidates, including the Suspension Policy, apply also to undergraduate studies students.

Post-baccalaureate Studies (PBS) is the classification used for U. S. citizens who wish to undertake academic work beyond the baccalaureate degree but who are not currently admitted to a degree program. This classification is not open to foreign nationals with the exception of the spouse of a regularly enrolled NCSU student. In special cases where students are sponsored by an agency of the U. S. government for specialized, non-degree study, approval may be given by the Graduate School of registration in the Post-baccalaureate Studies classification.

All UGS and PBS students must register through the Division of Lifelong Education either by mail or in person at the McKimmon Extension Education Center. *Persons found eligible to study as UGS or PBS students are not to assume that they have received formal admission to the university as either undergraduate or graduate degree candidate.* To become a degree candidate, formal application must be made through the Undergraduate Admissions Office or the Graduate School. Lifelong Education Students may not register for more than two courses plus PE in a semester or summer session. They may register for any course offered by the university, provided they satisfy the required course prerequisites and space is available.

SEMESTER COURSE LOAD

For undergraduate degree students the maximum course load is 21 credit hours a semester and two courses plus PE in a summer session. To carry more than the maximum, students must obtain the approval of their academic adviser and of their school dean. Undergraduate students who propose to register for 19 or more credit hours a semester must obtain approval from their academic adviser. First semester freshmen with a UPGA of less than 2.0 and continuing students with a GPA of less than 2.0 are advised to carry no more than 16 credit hours a semester.

For undergraduate studies students (UGS) the maximum course load is two courses plus PE in a regular semester or summer session. Exceptions must be approved by the Admissions Office.

The minimum course load for full-time undergraduate degree students is 12 credit hours, except in their final semester when a lesser number may be taken if that is all the student needs to fulfill the requirements for a degree. In all cases, to receive financial aid a student must meet the minimum course load requirements of the appropriate funding agency.

The number of hours for which a student is officially enrolled is that number in which the student is enrolled for credit at the end of the second week of classes (i.e., the last day to withdraw or drop a course with a refund).

GRADING SYSTEM

(Definition of Letter Grades and Grade Points)		
<i>Grade</i>	<i>Definition</i>	<i>Grade Points Per Credit Hour</i>
A	Excellent	4
B	Good	3
C	Satisfactory ("Passing" for graduate students)	2
D	Marginal	1
NC	No Credit	0

(The following grades are not used in the calculation of grade point averages.)

<i>S</i>	Satisfactory (Credit-only and certain other courses)
<i>U</i>	Unsatisfactory (Credit-only and certain other courses)
<i>CR</i>	Credit by Examination or Advanced Placement
<i>IN</i>	Incomplete
<i>LA</i>	Temporarily Late
<i>AU</i>	Audit
<i>NR</i>	No Recognition Given for Audit
<i>W</i>	Withdrawal or Late Drop

Explanation of Letter Grades

D—Marginal. This grade will be used to recognize that a student's performance was marginal but clearly better than that of students who receive NC.

NC—No Credit. This grade will be used to indicate that the student is not to receive course credit.

S—Satisfactory. This is a passing grade to be awarded only when the quality of the student's work is judged to be C or higher level. It is used as the passing grade for students who are taking free elective courses under the credit-only option. It may also be used for certain courses such as orientation courses, seminars, and research problems, in which A, B, and C grades are not appropriate.

U—Unsatisfactory. This is used to indicate that the student is not to receive credit for a credit-only or other course for which the passing grade would be S (*Satisfactory*).

CR—Credit. This is used by the registrar to indicate course credit received by examination or advanced placement as certified by appropriate departments or schools. This grade shall be awarded only when the advanced placement testing indicates that the quality of the student's work in the course would have been expected to be of C or higher level.

IN—Incomplete. This is a temporary grade. At the discretion of the instructor, students may be given an IN grade for work not completed because of a serious interruption in their work not caused by their own negligence. An IN must not be used, however, as a substitute for an NC when the student's performance in the course is deserving of No Credit. An IN is only appropriate when the student's record in the course is such that the successful completion of particular assignments, projects, or tests missed as a result of a documented serious event would enable that student to pass the course. Only work missed may be averaged into the grades already recorded for that student. An IN grade must be made up by the end of the next regular semester (not including summer sessions) in which the

student is enrolled, provided that this period is not longer than twelve months from the end of the semester or summer session in which the work was due. In the event that the instructor or department offering the course is not able to provide a student with the opportunity to make up the incomplete work by the end of the next regular semester in which the student is enrolled or within twelve months, whichever is shorter, the instructor or department offering the course must notify the student and the Department of Registration and Records of the date of the extended deadline for removing the IN grade.

Any IN grade not removed by the end of the next regular semester in which the student is enrolled or by the end of twelve months, whichever is shorter, or by the extended deadline authorized by the instructor or department offering the course and recorded by the Department of Registration and Records will automatically become a No Credit (NC) grade and will count as a course attempted.

Students must not register again for any courses in which they have IN grades; such registration does not remove IN grades, and the completion of the course on the second occasion will automatically result in an NC for the incompleted course.

LA—Temporarily Late. The LA is an emergency symbol to be used only when grades cannot be reported by the teaching department or the professor on time. The LA differs from the IN grade in that the student receiving the LA has completed the work of the course including the examination.

AU—Audit. This is used to indicate that a student has successfully audited a course by attending class regularly and completing the instructor's requirements.

NR—No Recognition Given for Audit. This grade is given if the instructor concludes that the auditor has gained little from the course due to poor attendance or failure to fulfill the instructor's requirements.

W—Withdrawal or Late Drop. The W will be used to indicate on all students' academic records all courses for which they have received official approval to drop or from which they have received official approval to withdraw after the deadlines for dropping 100- through 400-level or 500- and 600-level courses.

GRADE POINT AVERAGE

The number of credit hours attempted in a semester or summer session (for which grades of A, B, C, D, or NC are received) is divided into the total number of grade points earned to arrive at the Grade Point Average (GPA). The Grade Point Average will be calculated to three decimal points.

For example, if a student takes 16 credit hours, earning an A in two 3-credit courses, a B in one 3-credit course, and a B in one 2-credit course, a C in a 3-credit course, and a NC in a 2-credit course, the grade point average would be:

6 (credits of A)	x 4 (grade points per credit hour) = 24
5 (credits of B)	x 3 (grade points per credit hour) = 15
3 (credits of C)	x 2 (grade points per credit hour) = 6
2 (credits of NC)	x 0 (grade points per credit hour) = 0
	<hr/>
	45

The total number of grade points earned (45) divided by the number of credit hours attempted (16) equals the grade point average in this case 2.813.

ACADEMIC HONORS

High ranking students in their freshman year are eligible for membership in **Phi Eta Sigma** and **Alpha Lambda Delta**. Both of these national scholastic honoraries require a 3.5 semester grade point average or better during the first semester or a cumulative average of 3.5 for both semesters during the freshman year. Juniors ranking in the top three percent of their class, seniors ranking in the top sixth of their class and outstanding graduate students are eligible for election to membership in **Phi Kappa Phi**, a national scholastic honor society.

Semester Dean's List—A full-time undergraduate student who earns a semester average of 3.5 or better on 12 to 14 hours of course work for which grade points are earned or a semester average of 3.25 or better on 15 or more hours of course work for which grade points are earned shall be placed on the Dean's List for that semester.

Students are not eligible for the Dean's List in any semester in which they receive an NC or IN grade. When IN grades are resolved, however, students who are otherwise eligible shall be added retroactively to the Dean's List for that semester. Dean's List recognition shall be noted on the student's semester grade report and permanent academic record.

Graduation with Honors—Undergraduate degree honor designations are:

Cum Laude—for GPA 3.250 through 3.499

Magna Cum Laude—for GPA 3.500 through 3.749

Summa Cum Laude—for GPA 3.750 and above

To be eligible for degree honor designations students must have completed at least two semesters *and* at least 30 credit hours at NCSU.

Valedictorian, Salutatorian, and Highest Ranking Scholar in a School—

To be eligible for consideration as valedictorian, salutatorian, or highest ranking scholar in a school, an undergraduate student must have received at least 100 academic credits at North Carolina State University (including credit by examination, advanced placement credit, and S/U courses.) These 100 credits may include no more than 20 transfer credits through programs officially sponsored by North Carolina State University. Specifically, these programs are Cooperating Raleigh Colleges, National Student Exchange, International Student Exchange, NCSU sponsored study abroad programs, and the affiliated hospital programs in Medical Technology.

All students whose accumulated grade point averages, based on all courses attempted at North Carolina State University, make them eligible for one of these honors shall be so recognized. That is, in the case of ties, more than one student will receive the honor. However, in the case of ties for valedictorian, no salutatorian will be recognized.

GRADE REPORTS

At the end of each semester or summer session, Registration and Records issues a grade report showing all grades earned during that grading period, as well as the record of all previous work taken at this university.

As part of the registration process students will be asked to complete an address form giving a mailing address to which grade reports and other university correspondence will be mailed. Students have the choice of having their grade reports sent either to their parents or guardians, or directly to themselves.

Change of Name or Address—It is the student's responsibility to inform Registration and Records of any changes in name or address. Failure to do this may prevent prompt delivery of important university correspondence. Also, news stories about Dean's List students are sent to N.C. newspapers based on hometown information furnished Registration and Records.

ACADEMIC WARNING

At the end of any regular semester or summer session a notice of "ACADEMIC WARNING" shall be placed on the grade report of any undergraduate student who is not suspended at that time but whose accumulative GPA for courses taken at NCSU is less than 2.0. "ACADEMIC WARNING I" shall mean that a student's accumulative GPA at NCSU is below the 2.0 minimum required for graduation. "ACADEMIC WARNING II" shall mean that a student's accumulative GPA at NCSU is below the minimum required for retention under the next step in the graduated GPA suspension policy.

ACADEMIC SUSPENSION POLICY

All undergraduate students in any classification must maintain a grade point average which will assure that they are making progress toward the 2.0 grade point average minimum requirement for graduation. Students will be suspended at the end of any regular semester in which they do not meet the minimum required accumulative grade point average on all courses taken at NCSU according to the following graduate schedule:

Total of Hours Attempted at NCSU Plus Transferred Hours	Minimum Required Accumulative GPA on All Courses Taken at NCSU
1-27	No requirement
28-59	1.25
60-91	1.55
92-123	1.75
124 or more	1.95

Students whose hours attempted at NCSU plus transferred hours total 160 or more will not be permitted to register for courses subsequent regular semester until their academic record has been reviewed by their school dean in consultation with their major department or program. Students who in the judgment of their school dean are making appropriate progress toward the fulfillment of their degree requirements may be authorized to continue for an additional semester without conditions, or with conditions specified in writing. Authorization for these students to continue to register in subsequent semesters may be made by the school dean following similar reviews.

The preceding statements notwithstanding, students shall not be suspended at the end of their first regular semester at NCSU.

Suspended students who are attending a summer session for the purpose of improving their academic standing in order to regain eligibility for readmission to NCSU will have their suspension continued unless their performance in that summer session is sufficient to make them eligible for automatic readmission. A student who is not in a suspended status prior to a summer session will not be suspended because of performance in that summer session.

WITHDRAWAL FROM THE UNIVERSITY

An official withdrawal means that a student is allowed to drop, without academic penalty, all of the courses for which he/she is registered in a given semester or summer session. For each semester, the official academic calendar indicates the dates for withdrawing with a refund (less a registration fee) and for withdrawing without academic penalty. After the refund deadline, prorated refunds will only be authorized by the Fee Appeals Committee for medical or unusual hardship cases. After the official withdrawal period, withdrawals without academic penalty are granted only for unforeseeable, unavoidable and exceptional grounds.

The student's record will show the date of withdrawal followed by a list of the registered courses marked with a "W", but academic grades and quality points are not recorded. Regular (degree candidate) undergraduate and unclassified students initiate the official withdrawal process with the Counseling Center, 200 Harris Hall. Special (i.e., UGS and PBS lifelong education) students initiate their withdrawal process with the Division of Lifelong Education, McKimmon Center.

For degree students, some schools may require approval or notification of the Dean within the official withdrawal period. In cases of withdrawals granted for hardship reasons, Dean's approval, and in some cases, approval of the advisor and/or coordinator-of-advising is required. Cases of withdrawals granted for medical or emotional reason must be approved by the Counseling Center after evaluation of available documentation.

Parental approval to withdraw may be required for single students who are under eighteen. Withdrawal during a semester does not constitute a break in residency if the student returns the semester immediately following. In cases where a student has obligations to the university for such matters as housing, board plan and financial aid, the withdrawal will not be processed by Registration and Records until the student has officially cleared the obligations. It is highly recommended that students considering withdrawal consult their faculty advisor or departmental coordinator-of-advising before initiating the withdrawal process.

READMISSION OF FORMER AND SUSPENDED STUDENTS

A Former Student Returning is one who was not in attendance at all during the fall or spring semester prior to applying for re-admission. All former students returning, both graduates and undergraduates, except Lifelong Education Students must apply for readmission to the Department of Registration and Records, North Carolina State University, Box 7313, Raleigh, North Carolina 27695, at least 30 days prior to the date of desired enrollment. A student who received a bachelor's degree must (a) apply for admission to the Graduate School; or (b)

apply for acceptance as a Post-Baccalaureate Studies (PBS) Student through the Division of Lifelong Education; or (c) apply for readmission as a candidate for a second bachelor's degree or for a professional degree or as an undergraduate Unclassified Student. Preregistration alone is not sufficient to enable the student to be readmitted.

Readmission of Former Students

Students who were eligible to continue at North Carolina State University at the time of their leaving are eligible to return (except as indicated in (a) or (b) immediately below). Students in this category need only complete a readmission form to be readmitted to their former program.

- a. Students who were eligible to continue at the time of their leaving who have subsequently taken work at another institution and earned less than a C average on such work must complete a readmission form and write a letter of petition to the Admissions Committee.
- b. Students eligible to continue at the time of their leaving who have subsequently taken correspondence or extension work at North Carolina State University and earned grades which resulted in suspension must complete a readmission form and write a letter of petition to the Admissions Committee.

Readmission of Suspended Students.

- a. *Automatic Readmission.* Students who are academically suspended may do one or both of the following: (1) attend any number of summer sessions at NCSU; (2) enroll in NCSU Independent Study by Extension courses (formerly called correspondence courses) offered through the UNC Extension Division (Address: Independent Study by Extension, 121 Abernethy Hall, UNC, Chapel Hill, N.C. 27514, Phone: 919-962-1106).

When by one or both of these methods a suspended student has improved his or her academic standing to the extent that the student is no longer academically suspended, that student becomes automatically eligible for readmission to a regular semester and no letter or appeal to the University Admissions Committee by the student is necessary.

NOTE: Courses taken at an institution other than NCSU by a student suspended at NCSU do not affect the suspension status. A student academically suspended from another institution after attending NCSU must appeal to the University Admissions Committee for readmission to NCSU.

- b. *Appeal to the University Admissions Committee.* A student who is academically suspended, who is ineligible for automatic readmission as described above, and who feels that extenuating circumstances contributed to that suspension, may appeal to the University Admissions Committee for readmission to a regular semester. A letter must be written to the Committee stating:
 1. the reasons for former academic difficulty with an explanation of extenuating circumstances;
 2. why the student believes he or she can now successfully meet all degree requirements within a reasonable length of time;

3. the summer sessions or Independent Study by Extension courses that have been completed; and
4. the address and telephone number to be used for notification of the Admissions Committee's decision.

NOTE: The Admissions Committee will not act on the appeal of any student currently enrolled in any Summer School or Independent Study by Extension courses.

The letter should be mailed to: Department of Registration and Records, Attention: Admissions Committee, North Carolina State University, Box 7313, Raleigh, N.C. 27695. The letter must reach the Department of Registration and Records by the following deadlines:

1. *No later than 2 weeks before fall semester Registration Day for students who did not attend summer school or who attended first summer session only;*
2. *No later than 1 week before fall semester Registration Day for students who attended second summer session.*
3. *No later than 1 week before spring semester Registration Day.*

NOTE: The Admissions Committee meets prior to Registration Day. All material must be received in accordance with the above dates.

Intra-Campus Transfers (curriculum change).

A former student returning who desires a change of curriculum must have his or her records transferred to the new school and submit a properly validated Curriculum Change Form to the Department of Registration and Records, 100 Harris Hall, before readmission can be processed.

TRANSFER CREDIT

Transcripts of college course credit for new transfer students and for North Carolina State University students who have taken course work at another institution are evaluated by the dean of the appropriate school to determine how the work applies toward fulfilling the graduation requirements of each student's intended curriculum.

Students admitted to an NCSU undergraduate degree program who wish to take courses at another institution must obtain prior endorsement from their academic department and prior written approval from their school dean in order to insure that the transfer credits will apply toward fulfilling specific graduation requirements.

Transfer credit is not recorded on former students' permanent records until after they have been readmitted and have reenrolled.

REPEATING COURSES

Students who repeat a course, regardless of the grade previously made, will have both grades counted in their cumulative Grade Point Average, except as indicated below. Undergraduate students may be allowed as many semester hours as are appropriate in the departmental curriculum for courses that: 1) are titled *seminar, special problems, special topics, independent study or research* (usually numbered 290-299, 490-499 or 590-599) and 2) cover topics different

from those studied when the courses were previously taken. Unless a course satisfies one or the other of the above conditions, the semester hours will be counted only once toward the number of hours required for graduation even though students repeat and pass the course both times.

The adviser's approval is required for students to repeat any course previously passed with a C or better. Such approval should not be given when student wish to repeat a course which they have already passed with a grade of A or B. Nor should it be given when: 1) students wish to repeat a lower division course that they have passed with a grade of C or better after having successfully completed an advanced course covering the same material, 2) students wish to repeat a lower level course that they have passed with a C or better which is a prerequisite for an advanced course that they had already successfully completed, (3) students wish to take an introductory course after they have successfully completed an advanced course dealing with similar material, or (4) students wish to repeat a course in which they have an outstanding grade of IN.

Students must not register again for any courses in which they have IN grades; such registration does not remove IN grades; and the completion of the course on the second occasion will automatically result in an NC for the incompleted course. For information, contact the Department of Registration and Records, 100 Harris, 737-2572.

A student is eligible to repeat without penalty a maximum of three courses (but not more than 12 credit hours) at the 100- and/or 200-level provided all of the following criteria have been satisfied: (1) each course to be repeated was completed for the first time in the 1984 fall semester or during any regular semester or summer session thereafter at NCSU, (2) the student received a grade of D or NC on each course to be repeated, and (3) the student completes each repeated course at NCSU no later than twelve months from the date on which he or she completed the course on the first enrollment or when the course is next offered, whichever is later. (4) The student can receive the benefits of this policy only once for each course repeated.

To repeat a course without penalty under this policy means that an eligible student who completes for the second time a 100- or 200-level NCSU course may have the grade points and the credit hours attempted and earned on the first completion of the course removed from the calculation of his or her cumulative GPA, and from the calculation of the total hours attempted under the provisions of the suspension policy. The course title and grade on the first completion will continue to be shown on the official record.

CREDIT BY EXAMINATION

Undergraduate students currently registered at NCSU (degree, unclassified, or special) may request an examination for course credit in a course whether enrolled in that course or not, under the conditions described below. Students must initiate a request with their adviser (except when a teaching department awards credit based upon group testing for placement purposes). Should the adviser approve, the student must arrange for the examination with the department offering the course. The department may administer the examination in

any manner pertinent to the materials of the course. Departments are encouraged to offer credit by examination in all courses but have the prerogative of excluding certain courses which are demonstrably unsuited for credit by examination.

The academic standards for credit by examination will be commensurate with the academic standards for the course. If a student's performance on the examination is judged to be of C or higher quality, the department will notify the Department of Registration and Records on a Late Grade Report Form that the student has received Credit by Examination for the course. The Department of Registration and Records will enter the appropriate number of credit hours on the student's permanent academic record. Credits earned through Credit by Examination are not used in the computation of a student's grade point average.

The Department of Registration and Records will post course credit by examination to a student's permanent academic record only if that student is currently registered at NCSU. However, if the course credit by examination would enable a student to complete the requirements for a degree, that student would not have to be registered in order to receive the credit.

If a student fails to achieve C or higher quality work on an attempted credit by examination, no action is required other than the department's notifying the student. However, that student is not eligible for another such examination in the same course.

Once a student has failed a course or has completed for credit or audited more than fifty percent of a course, the student may not attempt credit by examination for that course. Under unusual circumstances, exceptions may be made upon the written recommendation of the student's adviser and the approval of the department offering the course. A student who receives credit by examination in a course in which that student is currently enrolled must officially drop that course no later than mid-semester, using a Schedule Revision Form.

CREDIT BY EXAMINATION THROUGH INDEPENDENT STUDY

Persons who are not currently enrolled on campus and who have gained through study or experience, knowledge of the content of undergraduate credit courses offered through Independent Study may (with the approval of the Independent Study staff and the academic department offering a course) receive credit for that course by special examination. Students may request approval to attempt credit by examination by completing and submitting a form available from the Independent Study Office, 121 Abernethy Hall, UNC-CH, Chapel Hill, N.C. 27514 (962-1106).

Currently enrolled students are not eligible for credit by examination through Independent Study. These students should go directly to the appropriate academic department to request credit by examination under the regular procedures in effect on campus.

CREDIT-ONLY OPTION FOR FREE ELECTIVE COURSES

Each undergraduate student has the option to count toward graduation requirements a maximum of 12 semester hours in the category of credit-only

courses (exclusive of courses authorized to be graded on Satisfactory-Unsatisfactory basis). The student may select as credit-only any course offered by the university except those in Military Science and Aerospace Studies. Selected course must be included under the free elective category of the specified curriculum in which the student is enrolled. The student will be responsible for attendance, assignments, and examinations.

The student's performance in a credit-only course will be reported as S (satisfactory grade for credit-only course and given when course work is equivalent to C or better) or U (no-credit grade for credit-only course). The grade for a credit-only course will have no effect on the student's Grade Point Average. The course and its grade will be counted in the cumulative hours attempted. *Credit-only courses do not count in the calculation of eligibility for the Semester Dean's List, which requires either twelve hours or fifteen hours of course work for which grade points are earned.*

Lifelong Education Students may take on a credit-only basis any course for which they satisfy prerequisites.

AUDITS (UNDERGRADUATE)

Students wishing to audit a course before or after taking it for credit must have the approval of their adviser and of the department offering the course. Auditors are expected to attend class regularly. The degree to which an auditor must participate in class beyond regular attendance is optional with the instructor; any such requirements should be clearly explained in writing to the auditor at the beginning of the semester. Should the instructor conclude that poor attendance has resulted in an auditor's gaining little from the course, the instructor should mark NR (no recognition given for an audit) on the final grade report. Students who have taken a course for audit may, with their adviser's approval enroll in the course for credit during a subsequent semester or summer session. For tuition cost purposes, audits are treated as full credit value. For all other purposes, hours of audit do not count in calculating undergraduate course loads.

NOTE: *Veteran's benefits are governed by Veterans Administration regulation concerning audits. Public Law 94-502 (G.I. Bill) and Public Law 634 (sons and daughters of deceased or disabled veterans) consider only courses being taken for credit when determining a student's load for benefit purposes. See Veterans Affairs Office, Harris Hall.*

INTRA-CAMPUS TRANSFERS

Undergraduate students wishing to change from one curriculum to another must report to the dean's office of the school offering the curriculum in which entrance is desired and request acceptance into the new school or curriculum.

A student who has attempted fewer than twelve credit hours at NCSU may transfer to another curriculum provided that student meets the admission requirements of the intended new curriculum. A student who has attempted twelve or more credit hours at NCSU may transfer to another curriculum provided that student is eligible to do so under the intra-campus transfer policy which pertains to the intended curriculum.

If acceptance is approved, a Curriculum Change Form will be issued, bearing the signature of the accepting dean. If the former curriculum was in a different school, the Curriculum Change Form should be submitted for the signature of the releasing dean with the request that all records be transferred to the new school and department. From the standpoint of advising, preregistration, and adding and dropping courses, the student is considered to be in the new curriculum as soon as the Curriculum Change Form is completed and filed with the Department of Registration and Records and the records of the student have been transferred to the new department.

Student Services

ACADEMIC SKILLS PROGRAM

The Academic Skills Program, located in 528-A Poe Hall (737-3163) and in 124 Reynolds Coliseum (737-2464), provides a variety of academic support services for undergraduate students. Free tutorials are available in many subject areas, with emphasis being placed on freshman and sophomore courses in English, foreign languages, mathematics, and sciences. However, students needing such assistance in any course may contact the Academic Skills Program staff.

A comprehensive and integrated program of academic support is available for those students whose educational backgrounds are such that they are likely to experience difficulty in making the transition to the rigorous demands of the university. Through tutoring, reading and study skills improvement programs, counseling, vocational guidance and special interest workshops, participants can be helped to get off to a good start in their college work.

The Academic Skills Program also provides academic advising for University Undesignated Freshmen, students who have enrolled at NCSU without having chosen a major field of study. The objective of this activity is to introduce undecided students to the wide variety of academic disciplines on campus and to help them make informed decisions about their major fields of study.

Study Skills Training. Seminars designed to assist students in developing more effective study techniques are conducted periodically upon request by the Academic Skills Program. Handouts on this subject are also available to students. Contact the Academic Skills Program, 528-A Poe, 737-3163.

ACCIDENT AND HEALTH INSURANCE

The university offers a student accident and health insurance program. The insurance covers the surgical, accident, and hospital needs of the student as a supplement to the Student Health Service. Each year complete information will be made available to students before school opens.

Health Educators offers a variety of information, programs and services to students. Health topics include weight-control, alcohol and drug education, stress management, first aid, sexually transmitted diseases, women's issues and more.

CAREER PLANNING AND PLACEMENT CENTER

The Center offers assistance to all students at the university on a year round basis. Advice on the relationship of professional goals to various programs of study and assistance in identifying individual aptitudes and abilities affecting career potential are available. Students are encouraged to participate in a Career Planning Workshop in the freshman or sophomore year.

The center coordinates job interviews between students and employer representatives. Seniors are urged to use this placement service for interviewing with potential employers. The staff also recommends contacts with employers not scheduled to visit the campus.

COUNSELING

The Counseling Center assists individuals in gaining a better understanding of themselves. Psychologists, professional counselors, and psychiatrists are available to work with students who desire assistance with concerns such as: choosing a career; academic planning; identifying and overcoming educational difficulties; developing greater self-understanding; developing more satisfying personal relations; and coping with stress or emotional crisis. All counseling is strictly confidential.

In addition to one-to-one and group counseling for individuals and couples, workshops are offered throughout the year in a variety of areas, including vocational exploration, study skills, anxiety-reduction, and assertive behavior.

Counseling services are available without cost to all enrolled NCSU students, and some services are available to prospective students. Appointments may be scheduled over the telephone by calling 737-2424 or in person by coming to 200 Harris Hall. (Evening appointments are available.)

FOOD SERVICE

Meals. Freshmen living on campus are required to participate in the Board Plan program. Resident students other than freshmen can participate in the Board Plan on a first come/first serve basis. University Dining offers three meal plan options: a 15-meal plan M-F, any-15-meal plan, and a 20-meal plan. Students should budget a minimum of \$600 to \$700 per semester for food. A cash program (Diner's Friend) is an economical option to those not on any of the board plans.

Dining Services. NCSU offers a wide range of dining opportunities ranging from an unlimited seconds meal plan, at the Dining Hall, to a full service buffet-cafeteria, snack bars, delis, an old fashioned ice cream parlors, and a steakhouse. University Dining provides food service for banquets, international dinners, cookouts, and parties which require a wide range of dining facilities. A sophisticated computer system provides the opportunity to eat in all areas of the campus without the worry of carrying cash.

HANDICAPPED STUDENTS

Students requiring special assistance because of visual, hearing, or motor handicaps should contact Handicapped Student Services, NCSU, Box 7312,

Raleigh, NC 27695-7312 (200 Harris Hall), 737-7653. Interpreter, tutorial, note-taker and/or reader services are available by contacting the center.

Direct services for all learning disabled students, such as educational assessment, remediation, educational counseling, and arrangements for appropriate academic support can also be initiated by the Handicapped Student Services.

Those students needing special assistance in scheduling courses should make contact as far as possible in advance of preregistration deadlines.

HEALTH

The university seeks to safeguard the health of the students in every way possible. The Student Health Service, located in Clark Hall Infirmary, offers medical care to students on an outpatient and inpatient basis. The facility is staffed by full-time physicians, registered nurses and other medical support personnel.

During most of the fall and spring semesters, the Health Service is open 24 hours a day, seven days a week. Only an outpatient clinic is operated during the summer session, some student holidays, and semester breaks. Physicians maintain regular office hours Monday through Friday and are on call at all times to assist the nurses on duty when a patient's condition warrants immediate attention.

All registered students pay a medical fee which covers both inpatient and outpatient professional services; i.e., visits to nurse or M.D., routine laboratory procedures and medications available in the student pharmacy. There is a nominal charge for x-rays, some lab tests, allergy injections, and special clinics. Students are responsible for the cost of laboratory tests and x-rays which must be performed by an off-campus agency, medications not available in the student pharmacy, and expenses incurred when referred to an off-campus M.D. or hospital.

All health and medical information is confidential and is not divulged to anyone without the written consent of the patient.

LAUNDRY AND DRY CLEANING

The University operates a laundry and dry cleaning facility on campus at reasonable prices. Branch offices are located in the residence halls for the convenience of the students.

LINEN RENTAL

During the regular academic year and summer school the student may rent at a reasonable rate a linen bundle (consisting of 2 twin bed sheets, 3 towels, pillowcase) and/or pillow.

CLOTHESLINE

Clothesline offers a convenient and economical way to keep your favorite clothes clean. NCSU Laundry and Dry Cleaners will wash, dry and fold up to 135 pounds of laundry, wash and press 75 shirts or blouses, and dryclean 15 items per semester, all for a reasonable rate.

The student may exchange linen weekly at the branch offices in the residence halls or the main laundry on Yarborough Drive. These services are available to both on- and off-campus students. Application forms for the regular academic year are mailed in July to each resident student. Students wishing the service for summer school terms should apply to Manager of the Laundry, Yarborough Drive, N.C. State University.

Upon withdrawal from the program, and at the request of the user, refunds are made based on weeks used and less a small handling charge.

THE PEER MENTOR PROGRAM

The Peer Mentor Program is a student peer helper program through which academically talented upperclass minority students serve as "mentors" to entering Afro-American students. This program stresses the mentoring process as a prime motivating factor in the recruitment, retention, and graduation of minority students from this university. It assists black freshmen in making a successful transition to campus life by providing them with a supportive contact person who acts as a sounding board for personal adjustment problems; interprets university policies; makes proper referrals; and generally, provides them with strategies for academic, emotional, and social success at NCSU.

All incoming black freshmen are assigned a peer mentor prior to their arrival on campus. These freshmen are paired with upperclass students who are in the same major whenever possible. Because the peer mentors are trained in "helping skills" and possess a working knowledge of the campus environment, they play a significant role in influencing students' perceptions of themselves and of the potential benefits and rewards which can be gained from the post-secondary learning experience.

STUDENTS SUPPLY STORES (Bookstore)

The official campus source for all books is Students Supply Stores, consisting of the main store and shopping center located on East Dunn Avenue, and the North Campus Bookshop, located in the lower level of the Erdahl-Cloyd Annex of the D. H. Hill Library. The main store provides all books, classroom supplies, graphics equipment and supplies, as well as selected convenience items. Special orders may be placed for books and merchandise not in stock. The North Campus Bookshop, open some evenings, specializes in evening course books, selected school supplies, newspapers, magazines and books of fiction and non-fiction. The entire Students Supply Stores operation is completely self-sustaining. Surpluses are transferred to the N. C. State University Scholarship Fund.

TRANSPORTATION

Operation and parking a vehicle on campus is a privilege, not a right. There are very few parking spaces for the number of people with on campus parking needs; therefore, students are encouraged to use transportation other than personal automobiles. There are various alternatives that may be chosen such as motorcycles, mopeds, bicycles, and carpools. Each alternative is both economical and convenient.

The university's special transit service, Wolfline, accommodates students living off-campus in nearby apartment complexes. Tickets for Wolfline may be picked up at the Parking Services Office and at the Student Center. The Capitol Area Transit Service (CAT) is available for students living throughout Raleigh.

Any student parking a car on campus is required to have a permit. Freshman residents and off-campus students living within a one mile radius of campus are not eligible for campus parking permits. Continuing students are encouraged to register for the appropriate parking permit during the Permit Pre-registration Program offered each spring. Parking permits are sold on a seniority basis (graduate, senior, junior, etc.) to most students who live off-campus.

Any person who brings a vehicle on campus is responsible for compliance with campus Parking and Traffic Rules and Regulations.

For more information on parking and transportation, please contact the Division of Transportation, NCSU Campus. Box 7221, Raleigh, North Carolina, 27695-7221, phone number (919) 737-3424.

Student Activities

The University makes every effort to provide surroundings which are pleasant and conducive to intellectual growth. In addition, a wide variety of athletic, cultural, and social opportunities are available to students. Through the services and activities affiliated with campus life, as well as through extra-curricular organizations and functions, the student at N.C. State may acquire experience in group leadership and community living to supplement and enrich the academic component of his education.

STUDENT GOVERNMENT

Every NCSU student is a member of a community which exercises executive, legislative, and judicial authority in matters of student affairs. Students have a voice in government through participation in campus-wide elections of officers, legislators, and judiciary members.

CLUBS AND SOCIETIES

Honorary. University-wide honorary societies include Golden Chain, senior leadership; Blue Key, junior leadership; Thirty and Three, sophomore leadership; Phi Eta Sigma and Alpha Lambda Delta, freshman scholarship; Gamma Beta Phi, scholarship and service; and Phi Kappa Phi, junior, senior, and graduate student scholarship.

Professional and Technical Organizations. The schools and departments of the university sponsor or supervise a large number of professional and technical societies and clubs. These organizations contribute substantially to students' professional and social growth.

Social Fraternities and Sororities. Twenty-four national social fraternities have chapters at State. They are Alpha Gamma Rho, Alpha Phi Alpha, Alpha Sigma Phi, Delta Sigma Phi, Delta Upsilon, FarmHouse, Kappa Alpha, Kappa Alpha Psi, Kappa Sigma, Lambda Chi Alpha, Omega Psi Phi, Phi Beta Sigma,

Phi Kappa Tau, Pi Kappa Alpha, Pi Kappa Phi, Sigma Alpha Epsilon, Sigma Alpha Mu, Sigma Chi, Sigma Nu, Sigma Phi Epsilon, Sigma Pi, Tau Kappa Epsilon, Theta Chi, and Theta Tau.

State has six national social sororities. They are Alpha Delta Pi, Alpha Kappa Alpha, Alpha Xi Delta, Chi Omega, Delta Sigma Theta, and Sigma Kappa.

Other Organizations. There are over 250 other student organizations, most of which are open to all interested students.

STUDENT PUBLICATIONS

North Carolina State students have the opportunity to edit and manage a variety of student-oriented publications. By working on these publications a student may gain valuable extra-curricular experience in journalism, broadcasting, production and design, leadership, and management.

There are four publications supported in large part by a designated portion of each student's non-academic fees and staffed entirely by students.

The **Agromeck**, the University yearbook, provides a record in words and pictures of student and campus activities during the past year.

The **Technician**, the student newspaper, is published three mornings a week.

The **Windhover**, the campus literary magazine, is published each spring.

WKNC (88.1-FM), the student radio station, operates at 3000 watts, enabling it to be heard within a 42-mile radius of Raleigh. The station operates 24 hours a day with a full staff of engineers, disc jockeys, and news personnel.

Several of the schools have their own publications dealing with material of special interest to students in that school. The publications include *Agri-Life*, Agriculture and Life Sciences; the *Pi-Ne-Tum*, Forest Resources; *The Southern Engineer*, Engineering; *The Textile Forum*, Textiles; *The Publications of the School of Design*; and *The Scientist*, Physical and Mathematical Sciences.

MUSICAL ORGANIZATIONS

Since the early days of North Carolina State, musical organizations have played an important part in campus life presenting concerts, furnishing music for official university functions and performing at athletic events. The combined membership of these organizations constitutes the largest voluntary student organization on campus. Students may join the bands, choral organizations, orchestras, and pipes and drums by reporting for an audition at the time and location indicated in the orientation schedule. Rehearsals are arranged to avoid conflicts with other classes or with study time. Membership in all musical organizations is open to any regularly enrolled student.

Bands. The Symphonic Band, the Fanfare Band, the British Brass Band and the Marching Band make up the four divisions of the N. C. State bands. Each band serves a specific purpose and assignments are made according to individual interests and abilities. The Symphonic, Fanfare and Brass Bands are concert organizations. The Marching Band is active only during football season.

Choral Groups. The Varsity Men's Glee Club, the University Choir, the Women's Chorale, the Chamber Music Singers and the New Horizons Choir make up the five choral divisions. Placement in an organization is made according to the student's abilities and interest. These groups present concert each year,

both on and off campus, as well as making radio and television appearances, recordings, tours and providing small ensembles for special occasions.

Orchestras. Members of the Raleigh Civic Symphony and the Concert Orchestra include NCSU students and faculty, students and faculty from area colleges and universities, and community members. Placement is according to individual ability, interest, and time to practice and rehearse. A wide range of orchestral music is read and performed, with concerts given on and off campus. Provisions are made for those with an interest in string quartet and other small ensemble experience. An Intermediate String Class is available for those who desire to improve their technical skills and who seek further playing experience before performing with one of the orchestras.

NCS Pipes and Drums. Students may learn to play the bagpipes, an instrument known to many of North Carolina's early settlers, and represent the university through this unique and distinctive medium. The NCS Pipes and Drums performs several times throughout the year at University and community functions. Pipes, drums, and equipment are furnished.

Musician-in-Residence. North Carolina State University established this special chair in the Music Department to facilitate the university's cultural development. Performing musicians are appointed to this position on a rotating basis. They are available without charge to all university classes and organizations for concerts and presentations.

UNIVERSITY STUDENT CENTER

The University Student Center provides a focal point for much of the extra-curricular life on campus including an extensive cultural program in theatre, film, music and dance designed to give students an opportunity to see and hear some of the world's greatest performers. The University Student Center houses the office of the Curator of Art who is responsible for the university's collection, gallery displays and a varied program designed to interest and instruct students in all aspects of the visual arts.

The University Student Center is guided by student officers, committee chairmen and a student-faculty board of directors. Programs the center sponsors include training in all aspects of theatre, plays produced by students, instruction and independent work in all kinds of crafts, a wide range of professional performances in jazz, pops, folk and classical music, dance and theatre. There are student committees working in all of these areas. Other student committees present lectures, films, game tournaments, black cultural programs, coffee houses, dances and dance instruction, gallery exhibits, and international student programs.

The facilities in the University Student Center and its branches include two theatres, a craft center, vending areas, game room, the newspaper offices, year-book office, radio station, Student Government offices, meeting rooms, offices for the IFC, and space for religious workers, volunteer services, and the international student advisor. In the center are a wide variety of food service facilities including a cafeteria, snack bar, delicatessen, ice cream bar, salad bar, and steak house.

THOMPSON THEATRE

Thompson Theatre is a student oriented theatre with an emphasis on flexibility and experimentation. Each production is open to all NCSU students, whether experienced or not, as actors, technicians, crew members and directors.

Major productions are directed and produced by the professional theatre staff. Experimental studio theatre productions are completely produced by students under the guidance and supervision of the professional staff. There are also black theatre and children's theatre productions.

Thompson Theatre works closely with the Department of Speech-Communication which offers several courses for those interested in theatre.

The University Players is the student organization within the theatre which recommends theatre operating policies and helps to determine the theatre's program.

STEWART THEATRE

Stewart Theatre, located in the University Student Center, offers an opportunity for students and other members of the university community to see and hear the best in professional performances: plays, jazz, pops, folk and chamber music concerts, both modern dance and ballet, films and lectures. Special rates are available to NCSU students.

CRAFTS CENTER

Located on the ground floor of the Thompson building is one of the finest crafts facilities on a university campus in the southeast. Instruction is offered in ceramics, woodworking, photography, textile design, weaving and a host of other crafts. The facilities are also available for independent work. The Crafts Center is open year-round. Supplies for most crafts can be purchased at the center.

LEADERSHIP TRAINING

A Leader's Reaction Course is maintained and operated by the Military Science Department. This course is designed to provide practical experience in problem-solving, decision-making, and directing the activities of small groups. The course is available to all student organizations and activities officially recognized by the university. Its use must be coordinated through the Professor of Military Science.

The **Pershing Rifles** is a student organization open to all students at North Carolina State University. Members of the Pershing Rifles participate in many physically and mentally demanding activities throughout the school year, including backpacking, mountaineering, rappelling, tactical exercises, helicopter flights, rafting, drill team activities and competitions. The Pershing Rifles is sponsored by the Army ROTC, though participants are not required to be enrolled in the ROTC program.

INTERCOLLEGIATE ATHLETICS

The Department of Athletics conducts the university's intercollegiate athletics program involving 12 varsity sports for men and 10 for women.

The athletics program is administered by the Athletics Director with the Athletics Council, made up of seven faculty, three alumni and three students, serving in an advisory capacity to the Athletics Director and Chancellor. The program is self-supporting and is operated through gate receipts, radio and television revenues, and student fees. Funds for athletics grants-in-aid are provided through the North Carolina State Student Aid Association (Wolfpack Club). Grants-in-aid are based upon the recommendation of the coach of each sport and approved by the Athletics Director and awarded by the university's Financial Aid Office.

Men's varsity sports include soccer, cross country, and football in the fall; basketball, swimming, fencing, rifle, indoor track, and wrestling in the winter; and track, golf, tennis, and baseball in the spring. Varsity sports for women are soccer, cross country, and volleyball in the fall; basketball, indoor track, swimming, fencing, rifle, and gymnastics in the winter; and track, golf, and tennis in the spring.

The university facilities include Carter-Finley Stadium (45,600 seats); Reynolds Coliseum (12,000 seats for basketball); Doak Field (3,800 seats for baseball); the Paul H. Derr Track Stadium (3,000 seats), with a nine-lane tartan track; a 2,200 seat swimming stadium, with a 25-yard by 25-meter pool and a 50-meter practice pool; a soccer field (6,000 seats); and a newly completed 12-court all-weather tennis complex. In addition, the Wolfpack athletics administrative offices, women's intercollegiate athletics offices, several men's sports coaches offices, and an athletics dining hall are housed in the Case Athletics Center. The Weisiger-Brown General Athletics Facility houses the football, track and wrestling coaches' offices, a weight room, a wrestling room, a training room, an equipment room, and dressing rooms for football, wrestling, and track.

INTRAMURAL-RECREATIONAL SPORTS

North Carolina State University maintains an extensive program of intramural-recreational sports administered by the Department of Physical Education. This program is divided into the areas of intramural sports, club sports, and special events.

The intramural sports program is available to all students, faculty, and staff. Twenty individual and team sports are offered and participants may join through different programs; i.e., residence halls, fraternities, sororities, open and co-recreational divisions.

Club sports programs are available to those interested in specialized activities that provide opportunities for instructional experiences, a higher level of competition, or recreational and social benefits. At present, the active clubs recognized are: Aerobic Dance and Exercise, Angling, Archery, Association of Retired Faculty Exercise, Badminton, Bowling, Frisbee, Ice Hockey, Judo, Lacrosse, Outing, Racquetball, Rodeo, Rugby, Sailing, Snow Ski, Volleyball, Water Polo and Water Ski.

"Big Four Day" is an extramural special event for men and women representing North Carolina State, UNC-Chapel Hill, Duke, and Wake Forest. The competition includes the sports of badminton, basketball, bowling, cross country, golf, racquetball, softball, swimming, table tennis, tennis, and volleyball.

The Intramural-Recreational Sports Program is comprehensive in scope and directed toward meeting the sports and physical activity needs of the students, faculty, and staff at North Carolina State University.



SCHOOLS, DEPARTMENTS, AND PROGRAMS OF STUDY

Undergraduate programs of study are offered by the School of Agriculture and Life Sciences, the School of Design, the School of Education, the School of Engineering, the School of Forest Resources, the School of Humanities and Social Sciences, the School of Physical and Mathematical Sciences, and the School of Textiles.

GENERAL EDUCATION DISTRIBUTION REQUIREMENTS

A university education should prepare students for a full life in their professions and occupations by means of curricula that provide both practical foundations for future careers and such intangibles as intellectual flexibility, broad knowledge, and a basic comprehension of human achievements. To accomplish these ends, all baccalaureate programs at NCSU include the following general education requirements:

English Composition—Satisfactory completion of ENG 111 and ENG 112.

Mathematics—Six credit hours of mathematics and/or work in the closely related fields of statistics, computer science, and logic. At least one of these courses must be a course in mathematics.

Humanities and Social Sciences—Eighteen credit hours not including ENG 111 and ENG 112. Within the minimum of eighteen credit hours, at least six credit hours must be in the humanities and at least six credit hours must be in the social sciences. A list of courses appropriate for use as humanities courses and a list of courses appropriate for use as social science courses are issued periodically by the Provost's Office. Courses not on the list may not be used to fulfill humanities or social science requirements in any curriculum. Schools and departments may specify groups of courses or specific individual courses from the list to be used by their students in fulfilling the humanities and social science requirements in their curricula.

Natural Sciences—Eight credit hours, including at least one basic course from the biological, earth, or physical sciences.

Free Electives—Nine credit hours of free electives. No limitations other than prerequisites are imposed upon the student's choice of these electives, except that no elected course may cover material substantially presented in a course previously taken. Students are encouraged to use their free electives to explore fields of study different from those required in their curriculum and, when appropriate, to make use of the credit-only procedure for such courses. Types of courses which are frequently selected as free electives include environmental awareness courses, fine arts, introductions to a discipline or technology designed for non-majors, and additional humanities and social sciences.

Physical Education—Four credit hours of physical education. Required physical education courses may be taken on a credit-only basis. Students with appropriate skills, experience, and knowledge may satisfy three of the four

required physical education credits through credit by examination for particular PE courses except for PE 100.

The full requirements for completion of each undergraduate program of study at NCSU reflect the general education distribution requirements described above, additional school requirements, and departmental requirements particular to a given major or degree program. Throughout this section the degree requirements are frequently shown as particular courses or categories of courses. The **course prefix abbreviations** (e.g., ANS, CSC, HI, and PSY) provide a key for locating the basic information for individual courses in the Course Description section of this catalog.

GRADUATION REQUIREMENTS

Students are eligible for graduation when they have completed satisfactorily all the academic requirements of their degree program as specified by their major department, their school, and the university.

NCSU requires that, in addition to other university, school, and departmental requirements, all students must have a grade point average of at least 2.0, based on all courses attempted at NCSU in order to be eligible to receive a baccalaureate degree.

Minimum Hours Required for Graduation—These are shown for each curriculum and range from 124 to 141. Curricula in the high range normally are those involving a required summer camp or field experience. Many students take more hours than the required minimum.

Semester-by-Semester Displays—The requirements for many curricula throughout this section are set forth in semester-by-semester displays. One purpose for these displays is to illustrate how certain sequences of courses and prerequisites may be scheduled. Another purpose is to reflect whether courses are normally offered in the fall or the spring semester. Otherwise the semester-by-semester displays are merely advisory and not mandatory. The curricula are displayed in eight semesters, but *students often take more than eight semesters to complete all requirements*. The typical semester schedule shown in the displays may not be the appropriate one for many students. Students are required to consult with their faculty advisors prior to preregistration each semester.

Limited D Grades—Some schools and departments have established limitations on the use of D grades in certain courses or categories of courses for satisfying graduation requirements.

Grade Point Average in Major—Some departments have established graduation requirements of a grade point average of 2.0 on all courses attempted in the major at NCSU in addition to the university grade point average requirement of a 2.0 for all courses attempted at NCSU. These include the following departments: Chemistry, Economics and Business, History, Sociology and Anthropology and all departments in the School of Engineering.

Residence Requirements—Transfer students, to be eligible for a bachelor's degree, normally must earn at least 24 of their last 30 hours of credit at NCSU while enrolled as degree candidates.

NOTE: *The School of Engineering has a policy that transfer students normally must earn at least 48 of their last 60 hours of credit at NCSU while enrolled as degree candidates.*

MINORS

Some departments at NCSU offer undergraduate minors for students wishing a systematic program of study in an area outside their major. All minors require at least 15 credit hours and may be either departmental or interdepartmental. Courses within the minor program may be used to satisfy any of the general requirements, including free electives, of a major curriculum. Minors are completely optional, the only requirement being that a student may not minor in the same discipline as their major. Students pursuing a minor must consult with a minor advisor on a plan of work and must file a copy of this plan with their major advisor at least one semester before graduation. Satisfactory completion of the minor will be noted on the final transcript following graduation.

TWO DEGREES

Students who have satisfactorily completed the requirements for more than one bachelor's degree may, upon the recommendation of their deans, be awarded two bachelor's degrees at the same or at different commencement exercises. To earn two degrees students register in one school or department and, with the cooperation of the second school or department, work out their program to cover the requirements for both. Students must file an approved Double Majors Only Curriculum Change Form with Registration and Records, 100 Harris Hall. An Application for Degree Form must be submitted for each degree.

TRANSCRIPTS OF ACADEMIC RECORD

A transcript is an exact copy of a student's permanent academic record at the time it is issued. A fee of two dollars is charged for each transcript.

No official transcript may be issued to or for a student who is indebted to the university until such indebtedness has been paid or satisfactorily adjusted.

Official transcripts are issued only upon the *written* request of the student to Registration and Records, Box 7313, Raleigh, N.C. 27695-7313.





SCHOOL OF AGRICULTURE AND LIFE SCIENCES

Patterson Hall (Room 115)

D. F. Bateman, *Dean*

J. L. Oblinger, *Associate Dean and Director of Academic Affairs*

H. B. Craig, *Associate Director of Academic Affairs and Director of Agricultural Institute*

M. W. Moore, *Academic and Career Advisor*

Modern agriculture is a complex industry built on the principles of science and business. The basic sciences are the foundations for modern agricultural technology, aiding aspiring agriculturist, environmentalist, and those interested in the medical and health related sciences in understanding the functions of living material. Likewise, the principles of economics and sociology provide preparation for agricultural business management and public service aspects of society.

The objectives of the academic program are as follows:

- 1) To provide an opportunity for a broad university education
- 2) To provide a variety of learning experiences
- 3) To offer a choice of specialization, sufficient for initial employment
- 4) To provide background for graduate or professional programs

A high percentage of all the gainfully employed persons in the United States are engaged in operations directly or indirectly related to food and fiber. For example, the food industry ranges from those who produce the food, supply material to the producer, and process the finished product to those who sell the products to the consumer. Hundreds of distinct occupations are represented in modern agriculture and biology. About 35 percent of the graduates elect to continue their education in graduate and professional schools.

STUDENT ACTIVITIES

Students in the School of Agriculture and Life Sciences have ample opportunities to take part in broadening extracurricular activities. Most departments have student organizations that provide professional as well as social experience. Representatives of these clubs form the Agri-Life Council. This council is the student organization representing the school. Student tours provide an opportunity to see firsthand the application of classroom principles. In addition, students representing agrimarketing, agronomy, animal science, horticultural science, food science, poultry science and soil science compete regionally and nationally in a number of activities providing student members a chance to learn by travel as well as by participation.

CURRICULA OFFERINGS AND REQUIREMENTS

A freshman enrolling in agriculture and life sciences has common core courses the first year—courses appropriate in all curricula. This approach allows the student time to explore various programs before selecting a curriculum. The student selects a major in a department, interdisciplinary program, or individualized course plan. All departments offer the science curricula; several the technology curricula. The Agricultural Business Management curriculum is offered in the Department of Economics and Business.

Departmental majors are offered as follows:

Science—agricultural economics, animal science, applied sociology, biochemistry, biological and agricultural engineering (joint program with the School of Engineering), botany, fisheries and wildlife sciences (joint program with School of Forest Resources), food science, horticultural science, medical technology, poultry science, and zoology. Preprofessional courses are offered in the science curriculum track.

Technology—animal science, biological and agricultural engineering, food science, horticultural science and poultry science.

Business—agricultural business management is offered through the Department of Economics and Business. Opportunity for double majoring in business and other programs is available.

Interdepartmental and Interdisciplinary Programs—These curricula offer the opportunity to select broad curriculum majors that involve two or more departments or schools:

Biological Sciences—A curriculum with emphasis on biological and physical sciences, especially designed for graduate or professional courses requiring a biology background.

Conservation—A curriculum concentrating on the use, management and improvement of natural resources. The curriculum is administered jointly by the School of Agriculture and Life Sciences and the School of Forest Resources.

Pest Management for Crop Protection—A curriculum with emphasis on the application of chemical and biological principles in the control of plant diseases, insects and weeds. The curriculum is administered by the Departments of Crop Science, Entomology, Horticultural Science and Plant Pathology.

Agronomy—A technical curriculum dealing with the fundamentals of crop production and soil management. The curriculum is administered by the Departments of Crop Science and Soil Science.

Individualized Study Program—A curriculum planned by the student with the assistance of a faculty advisory committee.

In addition to these cited curricula, a number of arrangements are available that provide the student an opportunity to select areas of course concentration.

HONORS PROGRAM

The School of Agriculture and Life Sciences has a comprehensive Honors Program for qualified freshmen and sophomores interested in participating in seminar discussion programs on broad topics. These sessions are led by outstanding professors.

Qualified juniors and seniors have an opportunity to participate in an independent research program. Faculty direction is provided on an individual basis to each student with the student selecting his own project.

HONOR SOCIETIES

Students in all majors with strong academic records are recognized by three national organizations that have local chapters, Gamma Sigma Delta, Alpha Zeta, and Alpha Epsilon Delta.

SCHOLARSHIP PROGRAM

The School of Agriculture and Life Sciences awards approximately 200 scholarships each year on a combination of selection factors including merit, financial need and leadership.

JEFFERSON SCHOLARS IN AGRICULTURE AND THE HUMANITIES

(See also School of Humanities and Social Sciences)

The Thomas Jefferson Scholars Program in Agriculture and the Humanities is a joint program of the School of Humanities and Social Sciences and the School of Agriculture and Life Sciences. It is a double degree program which permits participants to have two concentrations: one in an area of agriculture, such as agronomy, animal science, food science, or horticulture, and one in an area of humanities/social sciences, such as business management, public policy, international studies or general humanities. The double degree program may be individually designed to meet each student's particular interests and career goals. The purpose of the program is to produce potential leaders in agriculture who have not only technical expertise but also an appreciation for the social, political, and cultural issues that effect decision-making.

Each spring a number of entering freshmen are chosen to receive scholarships to participate in the Jefferson program. In addition, other qualified students may choose to pursue a double major in agriculture and the humanities under the Jefferson program.

Students interested in applying to the Jefferson Scholars program should contact: Office of the Dean, School of Humanities and Social Sciences, Box 8101, North Carolina State University, Raleigh, NC 27695-8101, or the Office of the Associate Dean, School of Agriculture and Life Sciences, Box 7601, before January 15.

For more information, contact the program coordinator, Martha W. Moore, (111 Patterson Hall, 737-3249) or Lynda Hambourger, Assistant to the Dean, Humanities and Social Sciences (106 Link Building, 737-2467).

INTERNATIONAL STUDIES

An international seminar is offered to interested students. In addition, an international option, requiring a modern foreign language and 12 semester hours of appropriate courses in the social sciences, is available for students enrolled in any curricula.

DEGREES

The Bachelor of Science degree is conferred upon the satisfactory completion of one of the curricula in this school.

The degrees of Master of Science, Master of Agriculture and Master of Life Sciences are offered in the various departments in the school.

The Doctor of Philosophy degree is offered in the following subject areas: animal science, biochemistry, biological and agricultural engineering, botany, crop science, economics, entomology, food science, genetics, horticultural science, marine sciences, microbiology, nutrition, physiology, plant pathology, sociology, soil science, toxicology, and zoology.

Further information on graduate offerings may be found in the Graduate Catalog.

OPPORTUNITIES

Broad and fascinating opportunities in business, industry, education and government are open to graduates of this school. Some of the areas in which graduates are employed are as follows:

Business and Industry—banking and credit, insurance, farm management, cooperatives, land appraisal, marketing, transportation, food chains, food processing and distribution, machinery and equipment, chemicals, fertilizer, feed manufacturing, and seed improvement.

Communications—writing, reporting, radio, television, newspapers, magazines, advertising, and publications.

Conservation—soil, water, forest, fish and wildlife, parks and recreation, field sanitation, and education.

Education—high school and college instruction in agriculture, biology, agricultural extension, and governmental and industrial agencies.

Farming and Ranching (agricultural production)—general livestock, field crops, fruits, vegetables, poultry, and ornamentals.

Preprofessional and Graduate Preparation—premedical programs for training for medical, dental, optometry and veterinary colleges; graduate programs.

Research—production, marketing, engineering, processing, biological sciences, conservation, organizational structure, and group behavior.

Services—inspection and regulation, production field service, health services, environmental quality, product standards, grading, agricultural technology and consulting.

A placement office, coordinated with the University Career Planning and Placement Center, is maintained to assist graduates in career development and placement.

FRESHMAN YEAR

The curricula in the School of Agriculture and Life Sciences have a common freshman year with the exception of the science program in biological and agricultural engineering. For the freshman year of that curriculum, see the School of Engineering.

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ALS 103 Introductory Topics in ALS	1	CH 101 General Chemistry I <i>or</i>	
BS 100 General Biology <i>or</i>		CH 107 Principles of Chemistry <i>or</i>	
CH 101 General Chemistry I*	4	BS 100 General Biology	4
ENG 111 Composition & Rhetoric	3	ENG 112 Composition & Reading	3
MA 111 Algebra and Trigonometry**	4	MA 112 Analytic Geometry & Calc. A <i>or</i>	
PE 100 Health & Physical Fitness	1	MA 114 Intro. to Finite Math. with Appl.	4-3
Humanities/Soc. Sci. Elective	3	Humanities/Soc. Sci. Elective	3
(Military Science or Air Science may be elected)		Physical Education	1
		(Military Science or Air Science may be elected)	
	16		14-15

*Both biology and chemistry are required for all ALS curricula.

**Does not contribute to the 130 semester hours required in the biochemistry, biological sciences or fisheries and wildlife sciences curricula, or the science program in biological and agricultural engineering.

CURRICULA IN AGRICULTURE AND LIFE SCIENCES

Science, technology and business are three curricula offered in this school. All departments offer the science curriculum. Several departments offer the choice of either science or technology. In addition, several departments are participating in interdisciplinary programs.

An agricultural business management curriculum is offered by the Department of Economics and Business. Double majors between agricultural business management and other subject areas may be arranged.

All the curricula have a core of required courses on a school basis. Courses peculiar to a specific department are listed under the departmental requirements. Listed on the following pages are the required courses by curriculum on a school basis. *All curricula require the completion of one course in literature.*

SCIENCE

	<i>Credits</i>		
ALS 103 Introductory Topics in ALS	1	CH 103 General Chemistry II	
		<i>or</i>	
Language (12 Credits)		CH 107 Principles of Chemistry	4
ENG 111 Composition and Rhetoric	3	MA 111 Algebra and Trigonometry	4
ENG 112 Composition and Reading	3	MA 112 Analytic Geometry & Calc. A.	
Electives (English or Modern Language)	6	<i>or</i>	
Humanities and Social Sciences		MA 114 Intro. to Finite Math. with Appl.	4-3
(21 Credits)		PY 221 College Physics	
Electives from Group D	21	<i>or</i>	
Physical and Biological Sciences		PY 211, PY 212 General Physics	5-8
(28-32 Credits)		Electives (60-64 Credits)	
BS 100 General Biology	4	Restricted Electives from Group A	22-26
Biological Sciences Elective	4	Departmental Requirements & Electives	26
CH 101 General Chemistry I	4	Free Electives	22
		Subtotal	126
		Physical Education	4
		Minimum Hours Required for Graduation	130

BUSINESS

(See Department of Economics and Business under School of Agriculture and Life Sciences)

TECHNOLOGY

	<i>Credits</i>
ALS 103 Introductory Topics in ALS	1
<i>Language (12 Credits)</i>	
ENG 111 Composition and Rhetoric	3
ENG 112 Composition and Reading	3
English Elective (Requirement may be satisfied by a modern language)	3
SP 110 Public Speaking	3
<i>Humanities and Social Sciences (21 Credits)</i>	
Electives from Group D	21
<i>Physical and Biological Sciences (32-33 Credits)</i>	
BS 100 General Biology	4
Biological Sciences Elective	4
CH 101 General Chemistry I	4

CH 103 General Chemistry II	
or	
CH 107 Principles of Chemistry	4
MA 111 Algebra and Trigonometry	4
MA 112 Analytic Geometry & Calc. A	
or	
MA 114 Intro. to Finite Math. with Appl.	4-3
matics with Applications	3
PY 221 College Physics	5
SSC 200 Soil Science	4

Electives (59-60 Credits)

Restricted Electives from Groups	
A, B or C	20-21
Departmental Requirements & Electives	27
Free Electives	12
Subtotal	126
Physical Education	4
Minimum Hours Required for Graduation	130

A B C D ELECTIVES

The following lists provide typical courses that may be selected from each of the four groups. Group A includes the physical and biological sciences; Group B, economics and business; Group C, applied science and technology; and Group D, social sciences and humanities. Other appropriate courses may be selected by checking with the office of the Director of Academic Affairs.

Group A

PHYSICAL AND BIOLOGICAL SCIENCES

Animal Science

ANS 401 Reproductive Physiology	
ANS 405 Lactation	
ANS (NTR, PO) 415 Comparative Nutrition	
ANS (NTR) 419 Human Nutrition in Health and Disease	
ANS (PHY) 502 Reproductive Physiology of Vertebrates	
ANS (GN) 508 Genetics of Animal Improvement	
ANS (NTR) 516 Quantitative Nutrition	

Biochemistry

BCH 451 Introductory Biochemistry	
BCH 452 Introductory Biochemistry Laboratory	
BCH 551 General Biochemistry	
BCH 552 Experimental Biochemistry	
BCH (GN) 561 Biochemical and Microbial Genetics	

Biological and Agricultural Engineering

BAE 303 Energy Conversion in Biological Systems	
---	--

Biological Sciences

All courses listed with the BS designation.

Biomathematics†

Appropriate courses

Botany

BO 200 Plant Life	
BO (ZO) 360 Introduction to Ecology	
BO (ZO) 365 Ecology Laboratory	
BO 400 Plant Diversity	

BO 403 Systematic Botany	
BO 413 Introductory Plant Anatomy	
BO (ZO) 414 Cell Biology	
BO 421 Plant Physiology	
BO 510 Plant Anatomy	
BO 522 Adv. Morphology and Phylogeny of Seed Plants	
BO 524 Grasses, Sedges and Rushes	
BO 565 Plant Community Ecology	
BO 570 Quantitative Ecology	

Chemistry†

Appropriate Courses

Computer Science†

Appropriate Courses

Entomology

ENT 301 Introduction to Forest Insects	
ENT 312 Introduction to Economic Entomology	
ENT (ZO) 425 General Entomology	
ENT 502 Insect Diversity	
ENT 503 Functional Systems of Insects	

Fisheries-Wildlife

FW (FOR) 404 Forest Wildlife Management	
FW (ZO) 420 Fishery Science	
FW (ZO) 515 Growth and Reproduction of Fishes	

Food Science

FS 331 Food Engineering	
FS 402 Food Chemistry	
FS 403 Food Analysis	

FS (MB) 405 Food Microbiology
 FS 504 Food Proteins and Enzymes
 FS (MB) 506 Advanced Food Microbiology

Forestry

FOR (WPS) 273 Quantitative Methods in Forest Resources
 FOR (FW) 404 Forest Wildlife Management

Genetics

GN 411 The Principles of Genetics
 GN 412 Elementary Genetics Laboratory
 GN 504 Human Genetics
 GN (ANS) 508 Genetics of Animal Improvement
 GN (ZO) 532 Biological Effects of Radiations
 GN (ZO) 540 Evolution
 GN (BCH) 561 Biochemical and Microbial Genetics

Marine, Earth and Atmospheric Sciences†

Appropriate courses.

Mathematics†

Appropriate Courses

Microbiology

MB 401 General Microbiology
 MB (FS) 405 Food Microbiology
 MB 411 Medical Microbiology
 MB 501 Advanced Microbiology I
 MB 502 Advanced Microbiology II
 MB (FS) 506 Advanced Food Microbiology
 MB 514 Microbial Metabolic Regulation
 MB (SSC) 532 Soil Microbiology
 MB 551 Immunology I

Nutrition

NTR (ANS, PO) 415 Comparative Nutrition
 NTR (ANS) 419 Human Nutrition in Health and Disease
 NTR (ANS) 516 Quantitative Nutrition

Physics†

Appropriate Courses

Physiology

PHY (ANS) 502 Reproductive Physiology of Vertebrates
 PHY (ZO) 503 General Physiology I
 PHY (ZO) 504 General Physiology II
 PHY (ZO) 513 Comparative Physiology

Plant Pathology

PP 501 Phytopathology I
 PP 502 Phytopathology II

Poultry Science

PO 405 Avian Physiology
 PO (ANS, NTR) 415 Comparative Nutrition
 PO (ZO) 524 Comparative Endocrinology

Soil Science†

SSC 200 Soil Science
 SSC 511 Soil Physics
 SSC 520 Soil and Plant Analysis
 SSC 522 Soil Chemistry
 SSC (MB) 532 Soil Microbiology

Statistics†

Appropriate Courses

Zoology

ZO 201 General Zoology
 ZO 212 Basic Anatomy and Physiology
 ZO (MEA) 220 Marine Biology
 ZO 302 Invertebrate Zoology
 ZO 303 Vertebrate Zoology
 ZO 315 General Parasitology
 ZO 323 Comparative Anatomy
 ZO 345 Histology
 ZO (BO) 360 Introduction to Ecology
 ZO 361 Principles of Zoological Development
 ZO (BO) 365 Ecology Laboratory
 ZO 410 Intro. to Animal Behavior
 ZO (BO) 414 Cell Biology
 ZO 415 Cellular and Animal Physiology Laboratory
 ZO (FW) 420 Fishery Science
 ZO 421 Principles of Physiology
 ZO (ENT) 425 General Entomology
 ZO 441 Biology of Fishes
 ZO 442 Biology of Fishes Laboratory
 ZO 450 Evolutionary Biology
 ZO 460 Aquatic Natural History Laboratory
 ZO 480 Techniques in Cellular Biology
 ZO (PHY) 503 General Physiology I
 ZO (PHY) 504 General Physiology II
 ZO 510 Animal Behavior Research Techniques
 ZO (PHY) 513 Comparative Physiology
 ZO (FW) 515 Growth and Reproduction of Fishes
 ZO 517 Population Ecology
 ZO (PO) 524 Comparative Endocrinology
 ZO (GN) 532 Biological Effects of Radiations
 ZO (GN) 540 Evolution

†Courses in these blocks are considered Physical Sciences.

Group B

ECONOMICS AND BUSINESS

Accounting

ACC 210 Accounting I—Concepts of Financial Reporting
 ACC 220 Accounting II—Introduction to Managerial Accounting
 ACC 280 Managerial Accounting
 ACC 310 Intermediate Financial Accounting I
 ACC 311 Intermediate Financial Accounting II
 ACC 320 Managerial Uses of Cost Data
 ACC 330 An Introduction to Income Taxation
 ACC 340 Accounting Information Systems
 ACC 420 Production Cost Analysis and Control
 ACC 430 Advanced Income Taxation
 ACC 450 Auditing Financial Information
 ACC 460 Specialized Financial Reporting Theory and Practice

Economics and Business

EB 230 Economics of Cooperatives
 EB 303 Farm Management
 EB 306 Agricultural Law
 EB 307 Business Law I
 EB 308 Business Law II
 EB 311 Agricultural Markets
 EB 313 Marketing Methods
 EB 325 Managerial Economics
 EB 326 Human Resource Management
 EB 332 Industrial Relations
 EB (ST) 350 Economics and Business Statistics
 EB 405 Regulatory Law
 EB 415 Farm Appraisal and Finance
 EB 420 Corporation Finance
 EB 422 Investments and Portfolio Management
 EB 425 Quantitative Methods of Management

EB 451 Introduction to Econometrics
 EB 460 Marketing Research
 EB (TMT) 482 Textile Marketing Management
 EB (WPS) 485 Management Development Seminar

Mathematics

MA 122 Mathematics of Finance

Statistics

ST (EB) 350 Economics and Business Statistics

Group C

APPLIED SCIENCE AND TECHNOLOGY

Agricultural Communications

AC 311 Communication Methods and Media
 AC 470 Agricultural Communications

Animal Science

ANS 200 Introduction to Animal Science
 ANS (PO) 204 Feeds and Feeding
 ANS (FS, NTR) 301 Modern Nutrition
 ANS 302 Livestock and Dairy Evaluation
 ANS 303 Principles of Equine Evaluation
 ANS 308 Advanced Livestock Judging
 ANS 310 Basic Horse Husbandry
 ANS 311 Breeding and Improvement of Domestic Animals
 ANS (FS, PO) 322 Muscle Foods and Eggs
 ANS (FS) 324 Milk and Dairy Products
 ANS 402 Beef Cattle Management
 ANS 403 Swine Management
 ANS 404 Dairy Cattle Management
 ANS 406 Sheep Management
 ANS 410 Horse Science
 ANS 412 Applied Animal Breeding
 ANS 510 Advanced Livestock Management
 ANS 520 Tropical Livestock Production

Biological and Agricultural Engineering

BAE 151 Elements of Biological and Agricultural Engineering I
 BAE 201 Shop Practices
 BAE 211 Farm Machinery
 BAE 241 Computer Applications in Agriculture
 BAE 252 Elements of Biological and Agricultural Engineering II
 BAE (PM) 312 Principles & Practices of Pesticide Application
 BAE (SSC) 321 Water Management
 BAE 332 Farm Structures
 BAE 341 Farm Electrifications and Utilities
 BAE 342 Agricultural Processing
 BAE 411 Farm Power and Machinery
 BAE 433 Processing Agricultural Products
 BAE 471 Soil and Water Engineering
 BAE 481 Agricultural Structures and Environment
 BAE (CE) 578 Agricultural Waste Management

Botany

BO (CS, ENT, PM, PP) 525 Biological Control

Civil Engineering

CE (BAE) 578 Agricultural Waste Management

Crop Science

CS 211 Introduction to Crop Plant
 CS 212 Introduction to Crop Management
 CS 214 Crop Science Laboratory
 CS 312 Pastures and Forage Crops
 CS 315 Turf Management

CS 316 Soybean Production
 CS 317 Corn Production
 CS 411 Environmental Aspects of Crop Production
 CS 413 Plant Breeding
 CS 414 Weed Science
 CS (SSC) 462 Soil-Crop Management Systems
 CS 511 Tobacco Technology
 CS 513 Physiological Aspects of Crop Production
 CS (HS) 514 Principles and Methods in Weed Science
 CS (BO, ENT, PM, PP) 525 Biological Control

Entomology

ENT 203 Bees and Beekeeping
 ENT (BO, CS, PM, PP) 525 Biological Control
 ENT 550 Fundamentals of Insect Control
 ENT 562 Insect Pest Management in Agricultural Crops
 ENT (ZO) 582 Medical and Veterinary Entomology

Fisheries-Wildlife

FW (ZO) 221 Conservation of Natural Resources
 FW (FOR) 310 Fisheries and Wildlife Inventory and Management
 FW (ZO) 353 Wildlife Management
 FW (ZO) 430 Fisheries-Wildlife Administration

Food Science

FS 201 Food Science and the Consumer
 FS (ANS, NTR) 301 Modern Nutrition
 FS (ANS, PO) 322 Muscle Foods and Eggs
 FS (ANS) 324 Milk and Dairy Products
 FS 400 Principles of Human Nutrition
 FS 416 Quality Control of Food Products
 FS 421 Food Preservation
 FS 423 Muscle Food Technology
 FS 425 Processing Dairy Products

Genetics

GN 301 Genetics in Human Affairs
 GN (PO) 520 Poultry Breeding

Horticultural Science

HS 100 Home Horticulture
 HS 101 Plants for Home and Pleasure
 HS 201 Principles of Horticulture
 HS 211 Ornamental Plants I
 HS 212 Ornamental Plants II
 HS 301 Plant Propagation
 HS 342 Landscape Horticulture
 HS 371 Interior Landscapes
 HS 400 Residential Landscaping
 HS 411 Nursery Management
 HS 416 Principles of Ornamental Planting Design
 HS 421 Tree Fruit Production
 HS 422 Small Fruit Production
 HS 431 Vegetable Production
 HS 440 Greenhouse Management
 HS 441 Floriculture I
 HS 442 Floriculture II
 HS 471 Tree and Ground Maintenance
 HS (CS) 514 Principles and Methods in Weed Science
 HS 531 Physiology of Landscape Plants

Nutrition

NTR (ANS, FS) 301 Modern Nutrition

Pest Management

PM 111 Introduction to Integrated Pest Management
 PM (BAE) 312 Principles and Practices of Pesticide Application
 PM (SSC) 370 Alternative Agricultural Systems
 PM 405 Theory and Practice of Integrated Pest Management

PM 415 Principles and Systems of Integrated
Pest Management
PM (BO, CS, ENT, PP) 525 Biological Control

Plant Pathology

PP 315 Principles of Plant Pathology
PP (FOR) 318 Forest Pathology
PP 404 Plant Diseases and their Control
PP 415 Plant Disease Control
PP 450 Nematode Diseases of Plants and Their Control
PP 505 Histopathology
PP (BO, CS, ENT, PM) 525 Biological Control

Poultry Science

PO 201 Poultry Science and Production
PO (ANS) 204 Feeds and Feeding
PO 301 Evaluation of Live Poultry
PO (ANS, FS,) 322 Muscle Foods and Eggs
PO 351 Grading and Evaluation of Poultry Products
PO 410 Production and Management of Game Birds
in Confinement
PO 420 Turkey Production
PO 421 Commercial Egg Production
PO 422 Incubation and Hatchery Management
PO 423 Broiler Production
PO (GN) 520 Poultry Breeding

Group D

HUMANITIES AND SOCIAL SCIENCES*

The student is required to complete 21 semester hours of Group D courses in all degree programs in the School of Agriculture and Life Sciences. A student may substitute one communications course (speech-communications or English language writing) for a Group D course in Area III. The student must take six semester hours from Area I and six semester hours from Area II courses. The remaining nine hours may come from any courses in Area III. Not more than six semester hours are to come from one department. A course in economics and a course in sociology are highly recommended.

AREA I

Humanities (6 semester hours)

Courses from approved Master List I in the following disciplines:

English Language Literature
Foreign Language—courses at 200-level or above**
History
History of Art
Music—courses at 200-level or above
Philosophy
Religion

AREA II

Social Sciences (6 semester hours)

Courses from approved Master List II in the following disciplines:

Anthropology
Economics-Business
Political Science
Psychology
Sociology

Soil Science

SSC (BAE) 321 Water Management
SSC 341 Soil Fertility and Fertilizers
SSC 342 Soil Fertility Laboratory
SSC 361 Non-Agricultural Land Use and
Management
SSC (PM) 370 Alternative Agricultural Systems
SSC 452 Soil Classification
SSC 461 Soil Physical Properties and Plant Growth
SSC (CS) 462 Soil-Crop Management Systems
SSC 472 Forest Soils

Veterinary Science

VMC 300 Laboratory Animal Management
VMF 401 Poultry Diseases
VMF 420 Diseases of Farm Animals

Zoology

ZO (FW) 221 Conservation of Natural Resources
ZO (FW) 353 Wildlife Management
ZO 419 Limnology
ZO (FW) 430 Fisheries-Wildlife Administration
ZO (ENT) 582 Medical and Veterinary Entomology

AREA III

Humanities or Social Sciences (9 semester hours)

Courses from any of the three approved Master Lists:

Any Master List I course—Humanities
Any Master List II course—Social Sciences
Any Master List III course—Supplemental courses
(Design, Education, Political Science,
Social Work, University Studies)

*Includes only courses in humanities and social sciences on approved Master Lists available from 115 Patterson Hall or adviser.

**Foreign language at the 100-level may be used to satisfy the school language requirement.

ADULT AND COMMUNITY COLLEGE EDUCATION

(See Graduate Catalog.)

AGRONOMY

Professor D. A. Emery, Coordinator of Advising—Crop Science; Williams Hall (Room 2210)

Associate Professor H. J. Kleiss, Coordinator of Advising—Soil Science; Williams Hall (Room 2224)

Students may earn a Bachelor of Science degree under the technology curriculum of Agriculture and Life Sciences with a major in agronomy. The agronomy curriculum is administered jointly by the Departments of Crop Science and Soil Science. For further information, see Crop Science or Soil Science.

CURRICULUM IN AGRONOMY

TECHNOLOGY PROGRAM

	<i>Credits</i>
ALS 103 Introductory Topics in ALS	1
<i>Languages (12 Credits)</i>	
ENG 111 Composition and Rhetoric	3
ENG 112 Composition and Reading	3
SP 110 Public Speaking	3
Literature Elective or ENG 321 (SS)	3
<i>Humanities and Social Sciences (21 Credits)</i>	
Electives (EB 212 required for CP, SS, and TM; EB 212 and EB 202 for Agr B)	21
<i>Physical and Biological Sciences (33 Credits)</i>	
BO 421 Plant Physiology or	
MB 401 General Microbiology (SS)	4
BS 100 General Biology	4
CH 101 General Chemistry I	4
CH 103 General Chemistry II or	
CH 107 Principles of Chemistry (SS)	4
MA 111 Algebra and Trigonometry	4
MA 112 Analytic Geometry and Calculus A (BS, SS and Agr-B) or	
MA 113 Introduction to Calculus or	
MA 114 Introduction to Finite Mathematics with Applications	4-3
PY 221 College Physics	5
SSC 200 Soil Science	4
<i>Physical Education and Free Electives (16 Credits)</i>	
PE 100 Health & Physical Fitness	1
Physical Education	3
Free Electives	12
<i>Advised Electives (25 Credits)</i>	
CH 220 Introductory Organic Chemistry (CP, TM, Agr B, SS) or	
CH 221 Organic Chemistry I (BS)	4
GN 411 Principles of Genetics (except SS)	3
MEA 101 General Physical Geology (SS)	3
MEA 110 Physical Geology Lab (SS)	1

Concentrations (Students are to select one concentration and complete the requirement as listed):

CROP PRODUCTION (CP)

CS 214 Crop Science Laboratory	1
CS 312 Pastures and Forage Crops	3
EB 303 Farm Management	3
PP 315 Principles of Plant Pathology or	
ENT 312 Introduction to Economic Entomology	4-3
SSC (CS) 462 Soil-Crop Management Systems	3
Elective	2-3

16

TURFGRASS MANAGEMENT (TM)

CS 214	Crop Science Laboratory	1
CS 315	Turf Management	3
EB 326	Human Resource Management	3
HS 342	Landscape Horticulture	3
PP 315	Principles of Plant Pathology or	
ENT 312	Introduction to Economic Entomology	4-3
Elective		2-3
		16

BASIC SCIENCES (BS)

BCH 451	Elementary Biochemistry	3
CH 223	Organic Chemistry II	4
CS 214	Crop Science Laboratory	1
MB 401	General Microbiology or	
BO (ZO) 414	Cell Biology	4-3
PP 315	Principles of Plant Pathology or	
ENT 312	Introduction to Economic Entomology	4-3
		15-16

AGRONOMIC BUSINESS (AGR B)

Crops and Soils

PP 315	Principles of Plant Pathology or	
ENT 312	Introduction to Economic Entomology	4-3
SSC (CS) 462	Soil-Crop Management Systems	3

Principles of Economics

EB 202	Economics II*	
EB 212	Economics of Agriculture*	
*Taken as Social Science/Humanities (Group D) electives		

Principles of Accounting

ACC 210	Accounting I	3
---------	--------------	---

<i>Business Courses</i> (Select one course from each of two of the following six areas)	6
---	---

Managerial Economics

EB 303	Farm Management
EB 325	Managerial Economics

Finance

EB 415	Farm Appraisal and Finance
EB 420	Corporation Finance

Personnel

EB 326	Human Resource Management
EB 332	Industrial Relations
EB 431	Labor Economics**

Marketing

EB 311	Agricultural Markets
EB 313	Marketing Methods
EB 430	Agricultural Price Analysis**

Law

EB 306	Agricultural Law
--------	------------------

Public Policy

EB 410	Public Finance**
EB 413	Competition, Monopoly, and Public Policy**
EB 436	Environmental Economics**
EB 433	U.S. Agricultural Policy**

**Require EB 301 as prerequisite. EB 301 may be taken as an extra elective or may be substituted for EB 202 above.

SOIL SCIENCE (SS)

BAE (SSC) 321	Water Management	4
CS 214	Crop Science Laboratory	1
SSC 361	Non-Agricultural Land Use & Management	3
SSC 462	Soil-Crop Management	3
Advised Elective		3
Statistics or Computer Sci. Elective		3
		17

*Agronomy Requirements
(22-24 Credits)*

CS 211	Introduction to the Crop Plant	2
CS 212	Introduction to Crop Management	2
CS 411	Environmental Aspects of Crop Production	2
CS 413	Plant Breeding (except SS)	2
CS 414	Weed Science	4
CS 490	Senior Seminar in Crop Science or	
SSC 492	Senior Seminar in Soil Science	1
SSC 341	Soil Fertility and Fertilizers	3
SSC 342	Soil Fertility and Fertilizers Lab	1
SSC 452	Soil Classification	4
SSC 461	Soil Physical Properties and Plant Growth	3
Minimum Hours Required for Graduation		130

ANIMAL SCIENCE

Polk Hall (Room 211)

Professor C. A. Lassiter, Head of the Department

Associate Professor J. C. Cornwell, Coordinator of Advising

TEACHING AND RESEARCH

Professors: J. H. Britt, E. V. Caruolo, A. J. Clawson, D. G. Davenport, E. J. Eisen, R. W. Harvey, B. H. Johnson, W. L. Johnson, E. E. Jones, J. G. Lecce, B. T. McDaniel, R. D. Mochrie, B. R. Poulton, A. H. Rakes, H. A. Ramsey, O. W. Robison, J. C. Wilk; *Distinguished University Research Professor:* C. L. Markert; *Professors Emeriti:* E. R. Barrick, L. Goode, J. M. Leatherwood, J. E. Legates, R. M. Myers, I. D. Porterfield, F. H. Smith, L. C. Ulberg, G. H. Wise; *Associate Professors:* W. J. Croom, K. L. Esbenshade, R. M. Petters, J. W. Spears, M. W. Tess; *Adjunct Associate Professors:* F. C. Gunsett, E. C. Segerson Jr.; *Associate Professors Emeriti:* E. U. Dillard, J. J. McNeil; *Assistant Professors:* J. D. Armstrong, K. R. Pond, U. G. Whitworth; *Associate Members of the Faculty:* J. C. Burns (Crop Science), M. D. Whitacre (Veterinary Medicine).

EXTENSION

Associate Professor R. G. Crickenberger, In Charge, Animal Husbandry

Professor F. N. Knott, In Charge, Dairy Husbandry

Professor J. R. Jones, In Charge, Swine Husbandry

Professors: K. R. Butcher, F. D. Sargent, C. M. Stanislaw, D. P. Wesen; *Professors Emeriti:* A. V. Allen, R. F. Behlow, T. C. Blalock, J. S. Buchanan, G. Hyatt, Jr., G. S. Parsons, J. W. Patterson, J. R. Woodard; *Associate Professors:* R. E. Lichtenwalner, R. L. McCraw, L. W. Witlow; *Assistant Professors:* M. T. Coffey, R. A. Mowrey, W. D. Schoenherr, S. P. Washburn; *Extension Specialists:* B. C. Allison, J. K. Butler, Jr., D. A. Clare, J. S. Clay, J. H. Gregory, R. W. Guthrie, R. M. Hughes, D. C. Miller, J. W. Parker, Jr., P. G. Stuckey, R. W. Swain.

Undergraduate students study subjects related to various phases of animal science. Courses are offered in nutrition, physiology, breeding and management, and there are opportunities for the application of basic scientific training in the husbandry areas. Options for course selection by each student make it possible for those with varying backgrounds and wide-ranging interests to become involved in stimulating and rewarding training.

OPPORTUNITIES

Opportunities for animal science majors include farm, dairy and livestock management careers, jobs as fieldmen for breed association and livestock organizations, agricultural extension, education, work in business and industries serving agriculture, meat grading, agricultural communications in animal science, feed manufacturing, sales work in feeds and equipment, marketing dairy cattle and dairy products, and supervising livestock and farm loans with banks and lending agencies. Many students in pre-veterinary medicine obtain degrees in animal science. Students may elect graduate study, after which they will find opportunities in teaching, research and extension. See listing of graduate degrees offered.

CURRICULA IN ANIMAL SCIENCE

The degree of Bachelor of Science with a major in animal science may be obtained under either the science or technology curricula offered in Agriculture and Life Sciences. For the basic requirements and freshman year refer to those sections under School of Agriculture and Life Sciences.

SCIENCE PROGRAM

	<i>Credits</i>
ALS 103 Introductory Topics in ALS	1
<i>Languages (12 Credits)</i>	
ENG 111 Composition and Rhetoric	3
ENG 112 Composition and Reading	3
SP 110 Public Speaking	3
Literature Elective	3
<i>Humanities and Social Sciences (21 Credits)</i>	
Electives	21
(Recommended including EB 212 and EB 202.)	
<i>Physical and Biological Sciences (28-31 Credits)</i>	
BS 100 General Biology	4
CH 101 General Chemistry I	4
CH 107 Principles of Chemistry	4
MA 111 Algebra and Trigonometry	4
MA 112 Analytic Geometry & Calculus A or MA 113 Introduction to Calculus	4
PY 221 College Physics or PY 211 & 212, General Physics	5-8
ZO 421 Principles of Physiology	3
<i>Physical Education and Free Electives (16 Credits)</i>	
PE 100 Health & Physical Fitness	1
Physical Education Electives	3
Free Electives	12
<i>Group A, B, C, Courses (25-28 Credits)</i>	
CH 221 Organic Chemistry I	4
CH 223 Organic Chemistry II	4
GN 411 The Principles of Genetics	3
MB 401 General Microbiology	4
Other (Recommend inclusion of BCH 451 & ST 311, only 6 may be B or C)	13
<i>Departmental Requirements and Electives (24 Credits)</i>	
ANS 200 Introduction to Animal Science	4
ANS (PO) 204 Feeds and Feeding	4
ANS 490 Seminar in Animal Science	1
A minimum of 9 credits from:	
ANS 311 Breeding and Improvement of Domestic Animals	3
ANS 401 Reproductive Physiology	3
ANS 405 Lactation	3
ANS (PO, NTR) 415 Comparative Nutrition	3
VMF 420 Diseases of Farm Animals	3
A minimum of 6 credits from:	
ANS 302 Livestock and Dairy Evaluation	3
ANS 402 Beef Cattle Management	3
ANS 403 Swine Management	3
ANS 404 Dairy Cattle Management	3
ANS 406 Sheep Management	3
ANS 410 Horse Science	3
Minimum Hours Required for Graduation	130

(See also Pre-Professional Program in Veterinary Medicine)

TECHNOLOGY PROGRAM

	<i>Credits</i>
ALS 103 Introductory Topics in ALS	1

Languages (12 Credits)

ENG 111	Composition and Rhetoric	3
ENG 112	Composition and Reading	3
SP 110	Public Speaking	3
Literature Elective		3

Humanities and Social Sciences (21 Credits)

Electives—(Recommend including EB 212 and EB 202)	21
---	----

Physical and Biological Sciences (31-35 Credits)

BS 100	General Biology	4
CH 101	General Chemistry I	4
CH 103	General Chemistry II or CH 107 Principles of Chemistry	4
MA 111	Algebra and Trigonometry	4
MA 112	Analytical Geometry & Calculus A or MA 113 Introduction to Calculus or MA 114, Introduction to Finite Math	4-3
PY 221	College Physics or PY 211 & 212 General Physics	5-8
SSC 200	Soil Science	4
ZO 421	Principles of Physiology	3

Physical Education and Free Electives (16 Credits)

PE 100	Health & Physical Fitness	1
Physical Education Electives		3
Free Electives		12

Group A, B, C Electives (18-22 Credits)

CH 220	Introductory Organic Chemistry	4
GN 411	The Principles of Genetics	3
Electives in A, B, or C Courses		11-15*

Departmental Requirements and Electives (27 Credits)

ANS 200	Introduction to Animal Science	4
ANS (PO) 204	Feeds and Feeding	4
ANS 490	Seminar in Animal Science	1
A minimum of 9 credits from:		
ANS 311	Breeding and Improvement of Domestic Animals	3
ANS 401	Reproductive Physiology	3
ANS 405	Lactation	3
ANS (NTR, PO) 415	Comparative Nutrition	3
VMF 420	Diseases of Farm Animals	3
A minimum of 9 credits from:		
ANS 302	Livestock and Dairy Evaluation	3
ANS 402	Beef Cattle Management	3
ANS 403	Swine Management	3
ANS 404	Dairy Cattle Management	3
ANS 406	Sheep Management	3
ANS 410	Horse Science	3
Minimum Hours Required for Graduation		130

*Dependent upon whether MA 112, 113 or MA 114 was elected.

BIOCHEMISTRY

Polk Hall (Room 126)

Professor S. B. Tove, Head of the Department

Professor F. B. Armstrong, Coordinator of Advising

Professors: H. R. Horton, J. S. Kahn, I. S. Longmuir, A. R. Main, W. L. Miller, E. C. Sisler, E. C. Theil; *Associate Professor:* J. A. Knopp; *Assistant Professor:* E. S. Maxwell; *Associate Members of the Faculty:* L. M. Ballas (Anatomy, Physiological Sciences & Radiology-Veterinary Medicine), E. E. Jones (Animal Science), L. W. Aurand, H. E. Swaisgood (Food Science).

The Biochemistry program provides B.S. graduates with the scientific background and skills required for employment in university, industrial, state, and federal research laboratories. The curriculum is especially suited to students preparing for graduate study in biochemistry, molecular biology, biotechnology, medical, and related fields. It emphasizes

the fundamentals of biological and physical sciences, offering students breadth of knowledge and depth of understanding. The curriculum provides students with broad experience in biological and chemical laboratories and encourages the development of experimental skills. Opportunities are provided for highly qualified students to undertake honors research during their junior and/or senior years.

BIOCHEMISTRY CURRICULUM

ALS 103	Introductory Topics in ALS	1
<i>Languages (12 Credits)</i>		
ENG 111	Composition and Rhetoric	3
ENG 112	Composition and Reading	3
FL	Foreign Language	6
<i>Humanities and Social Sciences (21 Credits)</i>		
Electives must include 6 credit hours each from the humanities and the social sciences.		21
Also, at least one literature course must be included within the required 21 credit hours.		
<i>Mathematical Science and Physics (21-23* Credits)</i>		
MA 102*, 201*, 202*	Analytic Geometry and Calculus I, II, and III (4,4,4)	
<i>or</i>		
MA 112, 212, ST 311	Analytic Geometry and Calculus A and B (4,3) and Introduction to Statistics (3)	12*-10
Computer, Mathematics, or Statistics	elective (3)	3
PY 205*, 208*	General Physics (4,4)	
<i>or</i>		
PY 211, 212	General Physics (4,4)	8
<i>Chemistry and Laboratory Analysis (23-25* Credits)</i>		
CH 101, 107	General Chemistry (4) and Principles of Chemistry (4)	8
CH 221, 223	Organic Chemistry I and II (4,4)	8
CH 431*, 433*	Physical Chemistry I and II (3,3)	
<i>or</i>		
CH 331	Introductory Physical Chemistry	6*-4
Laboratory Analysis elective: e.g., CH 315 (4) or CH 428* (3)		4-3*
<i>Life Sciences (31-34 Credits)</i>		
BS 100	General Biology	4
Life Science electives (must include both animal and plant science courses, and a course in physiology or cell biology)		11-12
BCH 451, 452B	Introductory Biochemistry and Laboratory (3,2)	5
MB 401	General Microbiology	4
GN 411	Principles of Genetics	3
Biochemistry or Life Sciences elective (3) [BCH 551*]		3
Laboratory or Library Research (e.g., BCH 490)		1-3
<i>Electives (16-21 Credits)</i>		
Technical electives (Advised)		0-5
Free electives		12
Physical Education (PE 100 plus Physical Education Electives)		4
Minimum Hours Required for Graduation		130

*Courses recommended for students preparing for graduate study in Biochemistry.

BIOLOGICAL AND AGRICULTURAL ENGINEERING

(Also see Engineering.)

David S. Weaver Laboratories (Room 100)

Professor F. J. Humenik, *Interim Head of Department*

Professor G. B. Blum, Jr., *Coordinator of Advising*

TEACHING AND RESEARCH

Professors: C. F. Abrams, Jr., H. D. Bowen, J. W. Dickens (USDA), F. J. Hassler, B. K. Huang, E. G. Humphries, W. H. Johnson, G. J. Kriz, W. F. McClure, R. P. Rohrback, R. W. Skaggs, R. S. Sowell, L. F. Stikeleather, C. W. Suggs, P. W. Westerman, T. B. Whitaker (USDA), D. H. Willits, Jr., E. H. Wiser, J. H. Young; *Professors Emeriti:* J. M. Fore, G. W. Giles, E. L. Howell, D. H. Howells, J. W. Weaver, Jr.; *Associate Professors:* G. R. Baughman, L. M. Safley; *Assistant Professors:* R. W. Botcheer, C. G. Bowers, Jr.; *Adjunct Assistant Professors:* G. M. Jividen, S. K. Seymour; *Instructor:* G. T. Roberson; *Associate Members of the Faculty:* D. D. Hamann, V. A. Jones, K. R. Swartzel (Food Science); A. E. Hassan (Forestry); *Senior Researcher:* S. C. Mohapatra.

EXTENSION

Professor: F. J. Humenik, *Associate Head in Charge of Extension*

Professors: J. C. Barker, E. O. Beasley, L. B. Driggers, J. W. Glover, R. E. Sneed, R. W. Watkins; *Professor Emeritus:* H. M. Ellis; *Associate Professors Emeriti:* J. C. Ferguson, W. C. Warrick; *Assistant Professor:* A. R. Rubin; *Extension Specialists:* M. D. Boyette, S. A. Dressing, R. O. Evans, Jr., J. N. Hunt, C. A. Jamieson, A. L. Lanier, R. P. Maas, R. L. McLymore.

Biological and agricultural engineering students are trained to deal with problems of agriculture that are engineering in nature. Scientific and engineering principles are applied to the conservation and utilization of water and soil, the development of power and labor-saving devices for all phases of agricultural production, the design of structures and equipment for housing and handling livestock and field products, and the processing and marketing of farm products.

Two curricula are offered, technology and science, which are explained below. Graduates receive a B.S. in biological and agricultural engineering.

OPPORTUNITIES

Graduates of the science curriculum are qualified for positions in design, development and research in public institutions and in industry, and for teaching and extension work in institutions of higher education. This curriculum, accredited by the Accreditation Board for Engineering and Technology, Inc., also provides adequate training for post-graduate work leading to advanced degrees. (See listing of graduate degrees offered.)

Those trained in agricultural engineering technology are qualified for positions in sales and service of agricultural equipment such as farm machinery, irrigation systems, etc.; as county agents or farmers; and for various types of farm advisory work.

CURRICULA IN BIOLOGICAL AND AGRICULTURAL ENGINEERING

SCIENCE PROGRAM

The science curriculum develops young people capable of engineering leadership in agriculture. Emphasis is placed on basic science courses such as mathematics, physics, mechanics, biology, soils, and thermodynamics, which provide a sound background for engineering and agricultural technology. Courses are directed to those methods of thought and techniques whereby science can be applied with understanding and judgment to engineering situations related to agricultural operations.

Since biological and agricultural engineering involves two distinct technical fields—agriculture and engineering—the science curriculum is a joint responsibility of Agriculture and Life Sciences and Engineering and is so administered. Undergraduate students in this curriculum may officially enroll in either school; duplicate undergraduate records are maintained in both schools.

For the program in agricultural engineering science, refer to the freshman year and the curriculum in the School of Engineering section.

TECHNOLOGY PROGRAM

The technology curriculum is for those who wish to work at the applied level in the agribusiness complex. Graduates are equipped to apply to the farm the new technology as developed and revealed by the professional agricultural engineer. The courses are presented and directed toward the solution of consumer problems with emphasis on the techniques employed.

Listed below are the departmental requirements in the technology program.

	<i>Credits</i>		
ALS 103 Introductory Topics in ALS	1	Physical Education Electives	3
		Free Electives	12
<i>Languages (12 Credits)</i>		<i>Group A, B, C Courses</i>	
		<i>(26-27 Credits)</i>	
ENG 111 Composition and Rhetoric	3	BAE 241 Computer Appl. ALS	3
ENG 112 Composition and Reading	3	PY 211 General Physics	4
SP 110 Public Speaking	3	PY 212 General Physics	4
Literature Elective	3	SSC 200 Soil Science	4
		Management Elective	3
<i>Humanities and Social Sciences</i>		Electives in A, B, or C courses	8-9
		<i>Departmental Requirements and Electives</i>	
		<i>(30 Credits)</i>	
Group D Electives	18	BAE 201 Shop Practices	2
EB 212 Economics of Agriculture	3	BAE 211 Farm Machinery	3
		BAE 303 Energy Conversion in Biological	
<i>Physical and Biological Sciences</i>		Systems	2
		BAE (SSC) 321 Water Management	4
		BAE 332 Farm Structures	3
BS 100 General Biology	4	BAE 341 Farm Electrification & Utilities	4
Biological Science Elective	4	BAE 411 Farm Power and Machinery	3
CH 101 General Chemistry I	4	BAE 433 Processing Agricultural Prod.	4
CH 103 General Chemistry II	4	BAE 461 Analysis of Agricultural	
MA 111 Algebra and Trigonometry	4	Systems	3
MA 114 Intro. to Finite Math. with Appl. or		GC 101 Engineering Graphics I	2
MA 112 Analytical Geometry & Calc. A	3-4	Minimum Hours Required for Graduation ...	130
<i>Physical Education and Free Electives</i>			
		<i>(16 Credits)</i>	
PE 100 Health & Physical Fitness	1		

BIOLOGICAL SCIENCES

Bostian Hall (Room 2717)

Professor C. F. Lytle, Coordinator

Professor: C. F. Lytle (Zoology); Associate Professors: R. L. Beckmann, Jr. (Botany), M. Feaver (Zoology), B. Parker (Entomology), T. E. Wynn (Botany).

The biological sciences constitute a rapidly developing field offering many challenging and rewarding opportunities for well-trained students. The Biological Sciences Interdepartmental Program offers a B.S. degree in biological sciences for students seeking a comprehensive training in biology and the supporting sciences.

Many graduates of this program continue further studies in graduate schools in such diverse fields as botany, zoology, marine biology, physiology, genetics, biochemistry, biotechnology, pharmacology, and microbiology. Others attend professional schools in medicine, optometry, and veterinary medicine as well as other health-related fields.

The biological science curriculum provides a modern, flexible undergraduate program to prepare students for rewarding careers in research and teaching as well as in business, industry, research institutes and governmental agencies. A wide range of career opportunities are available in technical sales, manufacturing and quality control, environmental management, and other positions with pharmaceutical companies, food manufacturers, medical laboratories, public utilities, and other industries.

Biological science majors may elect a general program of study or one of several options and emphases including entomology, microbiology, and nutrition. A joint program with the Department of Mathematics and Science Education leads to a double major and a teaching certificate.

BIOLOGICAL SCIENCES CURRICULUM AND CONCENTRATIONS

GENERAL

ALS 103	Introductory Topics in ALS	Credits
		1
Languages (12 Credits)		
ENG 111	Composition and Rhetoric	3
ENG 112	Composition and Reading	3
Foreign Language		6
Humanities and Social Sciences		
(21 Credits)		
Electives		21
Biological Sciences (31-32 Credits)		
BCH 451	Elementary Biochemistry	3
BO 200	Plant Life	4
BO (ZO) 360	Introduction to Ecology	3
BO (ZO) 365	Ecology Lab	1
BO 421	Plant Pathology or	
BO (ZO) 414	Cell Biology or	
ZO 421	Principles of Physiology	3
BS 100	General Biology	4
GN 411	Principles of Genetics	3
GN 412	Elementary Genetics Lab	1
MB 401	General Microbiology	4
ZO 201	General Zoology	4
NOTE: Students electing ZO 421 or BO (ZO) 414 must also elect either		
ZO 415	Cellular and Animal Physiology Laboratory	2
or		
BCH 452A	Experimental Biochemistry	2
or		
BCH 452B	Experimental Biochemistry	1
Physical Sciences and Mathematics		
(34-36 Credits)		
CH 101	General Chemistry I	4
CH 107	Principles of Chemistry	4
CH 221, 223	Organic Chemistry I and II	4+4
MA 112, 212	Analytic Geometry and Calculus A and B	4+3
plus		
ST 311	Intro. to Statistics or	
a 3-hour credit course in computer science, or		
another approved mathematics course		3
or		
MA 102, 201, 202	Analytic Geometry & Calculus I, II and III	4+4+4
PY 211, 212	General Physics	4+4
Physical Education and Electives (27-31 Credits)*		
Restricted Electives from Groups A, B, C, and D		11-15
Free Electives		12
PE 100	Health & Physical Fitness	1
Physical Education		3
Minimum Hours Required for Graduation		130

*Group A includes the physical and biological sciences; Group B, economics and business management; Group C, applied science and technology; Group D, social sciences and humanities.

ENTOMOLOGY CONCENTRATION

In addition to the general curriculum for the biological sciences, three additional entomology electives are required: ENT 312 or ENT 425 and ENT 503, plus three additional hours of entomology. For graduation, 130 semester credits hours are required.

NUTRITION CONCENTRATION

Along with the general curricular requirements for the biological sciences program, BO (ZO) 360, BCH 452B (2 credits), and four courses in nutrition (FS 400, NTR 415, NTR 490, and NTR 516) are specifically required.

MICROBIOLOGY OPTION

Along with the general curriculum for the biological sciences, three additional microbiology electives are required: MB 411 and MB 501 are usually recommended. MB 401 is required in the BLS curriculum. For graduation, 130 semester credit hours are required.

(See also Pre-Professional Program in Veterinary Medicine.)

BOTANY

Gardner Hall (Room 2214)

Professor E. D. Seneca, Head of Department

Professors: C. E. Anderson, U. Blum, R. J. Downs, R. C. Fites, J. W. Hardin, W. W. Heck (USDA), R. L. Mott, H. E. Pattee (USDA), H. Seltmann (USDA), J. R. Troyer, A. M. Witherspoon; *Distinguished University Research Professor:* W. F. Thompson; *Professors Emeriti:* D. B. Anderson, G. R. Noggle, H. T. Scofield, L. A. Whitford; *Associate Professors:* R. L. Beckmann, W. F. Boss, J. M. Stucky, J. F. Thomas, C. G. Van Dyke, T. R. Wentworth, T. E. Wynn; *Assistant Professor:* J. M. Burkholder; *Adjunct Assistant Professors:* D. E. Blume, R. A. Linthurst; *Associate Members of the Faculty:* E. C. Sisler (Biochemistry), J. M. Anderson (USDA), K. O. Burkey (USDA), S. C. Huber (USDA), T. W. Rufty (USDA) (Crop Science), D. E. Moreland (USDA) (Crop Science, Forestry), D. H. Timothy (Crop Science, Genetics), H. V. Amerson, A. W. Cooper (Forestry), M. M. Goodman (Crop Science, Statistics, Genetics), R. L. Hoffman (University Studies), R. J. Thomas (Wood & Paper Science), B. J. Copeland (Zoology).

The instructional program provides classroom, laboratory, and field experience in the major areas of plant science. Undergraduates majoring in botany are given a broad background in the humanities and physical sciences and are encouraged to participate in independent study in the senior year. Majors, as preprofessionals in the plant sciences, are prepared for advanced study in botany and other biological fields, as well as in the applied plant sciences such as horticulture, crop science, plant pathology, resource management and environmental biology.

OPPORTUNITIES

The undergraduate degree is an excellent preprofessional degree in the plant sciences. Many majors continue with graduate studies; see list of graduate degrees. There is need for such persons for teaching positions in community and junior colleges, colleges and universities, for research positions in federal and state government laboratories and in private industry.

Research technician positions in many other life science areas in governmental and industrial laboratories are also career possibilities. The field of biotechnology provides additional technical opportunities. Field botanists and naturalists are needed in state and national park systems and nature interpretation programs.

CURRICULUM IN BOTANY

The Bachelor of Science degree with a major in botany is offered under the science curriculum of the School of Agriculture and Life Sciences. See the freshman year program listed. See also other basic requirements listed.

The Bachelor of Science degree with double concentration—one in economics, English, history, philosophy or political science, and another in botany—is available in the School of Humanities and Social Sciences. For details, refer to section on School of Humanities and Social Sciences.

SCIENCE PROGRAM

	Credits
ALS 103 Introductory Topics in ALS	1
<i>Languages (12 Credits)</i>	
ENG 111 Composition and Rhetoric	3
ENG 112 Composition and Reading	3
ENG 321 Communication of Technical Info.	3
Language or Speech Elective	3
<i>Humanities and Social Sciences (21 Credits)</i>	
PHI 205 Problems and Types of Philosophy or	
PHI 333 Theory of Knowledge or	
PHI 340 Philosophy of Science or	
PHI 341 Topics in the Philosophy of	
Science or	
HI 321 Ancient and Medieval Science or	
HI 322 Rise of Modern Science	3
Elective From Group D	18
<i>Physical and Biological Sciences (32 Credits)</i>	
BS 100 General Biology	4
CH 101 General Chemistry I	4
CH 103 General Chemistry II or	
CH 107 Principles of Chemistry	4
MA 111 Algebra and Trigonometry	4
MA 112 Analytic Geometry and Calculus A*	4
PY 211, 212 General Physics	8
ZO 201 General Zoology or	
ZO 302 Invertebrate Zoology or	
ZO 303 Vertebrate Zoology	4
<i>Restricted Electives from Groups A and C (22 Credits)</i>	
CH 220 Introductory Organic Chemistry*	4
CSC 101 Introduction to Programming	3

CONSERVATION

(Also see Forest Resources.)

Williams (Room 2224) and Biltmore (Room 2028) Halls

Professor H. J. Kleiss, Major Adviser, School of Agriculture and Life Sciences

Professor L. C. Saylor, Major Adviser, School of Forest Resources

Conservation is the wise use, perpetuation, or improvement of natural resources, for the long-time benefit of society. This baccalaureate degree program is offered jointly by the Schools of Agriculture and Life Sciences and Forest Resources. Faculty members in several departments of the two schools are directly involved in various aspects of education in conservation.

Rapid urbanization and industrialization concomitant with population growth and changes in lifestyles are bringing increased pressures on the use of land for providing food, water, fiber, wood and recreation. These trends present challenges to resource managers who must be well trained in the basic concepts of several disciplines in order to apply a conservation philosophy to many of our current resource problems.

CONSERVATION CURRICULUM

Students may enroll in either Agriculture and Life Sciences or Forest Resources, depending on their primary area of interest in conservation. The freshman common core of courses for either school is acceptable. All students take a prescribed core of subjects in conservation plus specified courses in one of five concentrations: soil conservation; environmental

GN 412	Elementary Genetics Laboratory	1
MB 401	General Microbiology	4
SSC 200	Soil Science	4
ST 311	Introduction to Statistics	3
Three credit hours of 200 level or above course with the following abbreviations CS, FS, HS and PP or FW(ZO) 221 or FW(ZO) 353		
		3

<i>Departmental Requirements and Electives (26 Credits)</i>	
BO 200 Plant Life	4
BO (ZO) 360 Introduction to Ecology	3
BO (ZO) 365 Ecology Lab	1
BO 400 Plant Diversity	4
BO 403 Systematic Botany	4
BO 413 Introductory Plant Anatomy	3
BO 421 Plant Physiology	4
GN 411 The Principles of Genetics	3

<i>Physical Education and Free Electives</i>	
<i>(16 Credits)</i>	
PE 100 Health & Physical Fitness	1
Physical Education Electives	3
Free Electives	12
Minimum Hours Required for Graduation ... 130**	

*The proposed program meets the minimum requirements for graduate work; however, additional courses are encouraged in mathematical and physical sciences for students who are planning advanced study. See adviser.

**Completion of one course in literature is required.

technology; environmental education; natural resource management and administration; communications. A dual degree program involving the conservation curriculum with another curriculum, e.g., science education, pest management, recreation, soil science, forestry is very feasible and highly recommended.

SCIENCE PROGRAM

	<i>Credits</i>
ALS 103 Introductory Topics in ALS*	1

Languages (12 Credits)

ENG 111 Composition and Rhetoric	3
ENG 112 Composition and Reading	3
ENG 321W Communication of Tech. Info.	3
SP 110 Public Speaking	3

Humanities and Social Sciences (21 Credits)

EB 212 Econ. of Agriculture	3
PS 201 Introduction to American Government ..	3
Literature Elective	3
Electives	12

Physical and Biological Sciences (29 Credits)

BS 100 General Biology	4
CH 101 General Chemistry I	4
CH 103 General Chemistry II or	
CH 107 Principles of Chemistry	4
MA 111 Algebra and Trigonometry	4
MA 112 Analytic Geometry and Calculus A or	
MA 113 Introduction to Calculus	4
PY 221 College Physics	5
ZO 201 General Zoology or	
BO 200 Plant Life	4

Physical Education and Electives (13 Credits)

PE 100 Health & Physical Fitness	1
Physical Education Electives	3
Free Electives	9

Departmental Requirements and Electives (56 Credits)

BO (ZO) 360 Introduction to Ecology	3
BO (ZO) 365 Ecology Lab	1
FOR 252 Fundamentals of Forest Mgmt.	3
FOR 401 Forest Hydro. & Watershed	
Mgmt.	4
FOR 472 Renew Resource Pol. & Mgmt.	4
MEA 110 Physical Geology Lab	1
MEA 120 Elements of Physical Geology	2
RRA 350 Outdoor Recreation Management ..	3
SSC 200 Soil Science	4
ST 311 Introduction to Statistics	3
ZO (FW) 221 Conservation of Natural	
Resources	3
ZO (FW) 353 Wildlife Management or	
ZO (FW) 420 Fishery Science	3
Biological Science Electives	6
Conservation Electives	16

Minimum Hours Required for Graduation .. 132

SOIL CONSERVATION CONCENTRATION

PM 111 Integrated Pest Management	1
SSC (BAE) 321 Water Management	4
SSC 361 Non-Agri. Land Use & Management ..	3
SSC 452 Soil Classification	4

SSC 461 Soil Physical Properties and	
Plant Growth	3
SSC 492 Senior Seminar in Soil Science	1
	16

ENVIRONMENTAL TECHNOLOGY CONCENTRATION**

BAE (CE) 578 Agricultural Waste	
Management***	3
CE 486 Measurements of Water Quality	3
FS (MB) 405 Food Microbiology	3
SSC 361 Non-Agricultural Land Use and	
Management	3
SSC 452 Soil Classification	4
	16

NATURAL RESOURCE MANAGEMENT AND ADMINISTRATION CONCENTRATION+

EB 307 Business Law I	3
EB 410 Public Finance	3
EB 436 Environmental Economics	3
FOR 491 Sr. Problems in Forestry or	
PS 491 Internship in Political Science or	
SSC 492 Sr. Seminar in Soil Science	1
MEA 200 Introduction to the Marine	
Environment	3
PS 312 Introduction to Public Administration ..	3
	16

ENVIRONMENTAL EDUCATION CONCENTRATION++

ED 203 Intro. to Teaching Math. &	
Science	3
ED 296D Special Topics in Science Education ..	1
ED 475 Methods of Teaching Science	3
Electives	9
	16

COMMUNICATIONS CONCENTRATION+++

ENG 214 Copyediting	3
ENG 215 Prin. of News Article Writing	3
SP 112 Basic Principles of Inter-	
personal Communication	3
SP 201 Theories of Persuasive Communication ..	3
SP 298 Special Proj. in Speech Commun. or	
FOR 491 Senior Problems in Forestry or	
SSC 492 Senior Seminar in Soil Science	1
Elective	3
	16

*For students enrolled in School of Agriculture and Life Sciences; students enrolled in School of Forest Resources not taking ALS 103 will increase free electives by one hour.

**MB 401 is a required biological sciences elective.

***or BAE (SSC) 321

+ PS 202 and EB 301 are required Group D electives.

++ PHI (ED) 304 is a required Group D elective.

+++ SOC 302 is a required Group D elective.

CROP SCIENCE

Williams Hall (Room 2210)

Professor B. E. Caldwell, Head of the Department

Professor D. A. Emery, Coordinator of Advising

TEACHING AND RESEARCH

Professors: J. C. Burns (USDA), D. S. Chamblee, H. D. Coble, F. T. Corbin, W. T. Fike, Jr., M. M. Goodman, H. D. Gross, G. R. Gwynn (USDA), S. C. Huber (USDA), J. A. Lee (USDA), R. C. Long, D. E. Moreland (USDA), R. P. Patterson, D. H. Timothy, J. B. Weber, W. W. Weeks, E. A. Wernsman, R. F. Wilson (USDA), A. D. Worsham, J. C. Wynne; *Professor Emeritus:* W. D. Gilbert; *Adjunct Professors:* D. T. Patterson, L. Thompson, Jr.; *Professors Emeriti:* C. A. Brim, J. F. Chaplin, W. A. Cope, D. U. Gerstel, W. C. Gregory, P. H. Harvey, R. L. Lovvorn, R. P. Moore, L. L. Phillips, J. C. Rice, D. L. Thompson, J. A. Weybrew; *Associate Professors:* D. T. Bowman, J. W. Burton (USDA), J. M. DiPaola, R. D. Keys, J. E. Miller, H. T. Stalker, Jr.; *Assistant Professors:* J. M. Anderson (USDA), K. O. Burkey (USDA), T. E. Carter (USDA), D. A. Danehower, D. S. Fisher, H. M. Linker, J. P. Murphy, S. M. Reed, R. C. Ruffy, T. W. Ruffy (USDA), P. H. Sisco (USDA), V. A. Sisson (USDA), G. G. Wilkerson; *Associate Members of the Faculty:* A. S. Heagle, S. M. Schneider (Plant Pathology), H. Seltmann (Botany), T. J. Sheets (Entomology, Horticultural Science), C. T. Young (Food Science).

EXTENSION

Professor W. K. Collins, In Charge, Crop Science Extension

Professors: E. J. Dunphy, J. T. Green, W. M. Lewis, F. W. McLaughlin, J. P. Mueller, G. A. Sullivan; *Professors Emeriti:* R. R. Bennett, C. T. Blake, S. H. Dobson, S. N. Hawks, G. L. Jones, A. Perry, A. D. Stuart; *Associate Professors:* J. R. Anderson, R. L. Davis, R. E. Jarrett, G. F. Peedin, A. C. York; *Associate Professor Emeritus:* W. G. Toomey; *Assistant Professors:* A. H. Bruneau, D. S. Guthrie, H. M. Linker, W. D. Smith, M. G. Waggar; *Assistant Professor Emeritus:* R. H. Crouse; *Extension Specialists:* D. W. Daniel, G. E. Martin, Jr.

The increase in human populations, the continuing evolution of pests and diseases, the challenge of new natural and artificial environments and the decrease of farmland are all critical current world issues.

This department's curriculum is designed to give the agronomy major an awareness and a sense of personal involvement in these issues. The student receives a working knowledge of the fundamental principles of plant and soil science which tend to shape modern crop production practices. He or she is trained in the economics of various crop management procedures which may influence long-range investments.

OPPORTUNITIES

The opportunities within the state for agronomy graduates in county extension programs, in farm management, in the turfgrass industry, as salesmen of seed and agricultural chemicals and in the several governmental agencies remain good. Demand for qualified students in national and international concerns is increasing.

For crop science graduate programs, see listing of graduate programs.

UNDERGRADUATE CURRICULA

Students may earn a Bachelor of Science degree under the technology curriculum with a major in agronomy. The agronomy option is administered jointly by the Departments of Crop Science and Soil Science. See agronomy curriculum.

The Departments of Crop Science, Entomology, Horticultural Science and Plant Pathology offer a joint undergraduate major in pest management for crop protection.

DAIRY SCIENCE

(See Animal Science.)

ECONOMICS AND BUSINESS

Patterson Hall (Room 216)

Professor D. M. Hoover, Head of the Department

Professor R. K. Perrin, Associate Head for Agricultural Research and Teaching

Professor E. W. Erickson, Director for Center of Economic and Business Studies

Associate Professor J. S. Lapp, Associate Head for Economics and Business

Associate Professor M. B. McElroy, Assistant Head and Graduate Programs Administrator

Professor C. J. Messere, Associate Head for Accounting and Business Law

Lecturer B. L. Puryear, Adviser/Counselor

TEACHING AND RESEARCH

Professors: G. A. Carlson, R. L. Clark, A. J. Coutu, R. M. Fearn, D. Fisher, A. R. Gallant, D. M. Holthausen, D. N. Hyman, L. A. Ihnen, P. R. Johnson, T. Johnson, C. P. Jones, R. A. King, C. R. Knoeber, E. C. Pasour, Jr., R. J. Peeler, Jr., R. A. Schrimper, J. J. Seater, R. E. Sylla, C. B. Turner; *Professors Emeriti:* A. J. Bartley, D. R. Dixon, B. M. Olson, J. A. Seagraves, R. L. Simmons, J. G. Sutherland (USDA), W. D. Toussaint; *Associate Professors:* S. G. Allen, D. S. Ball, D. L. Baumer, J. C. Dutton, D. J. Flath, K. B. Frazier, T. J. Grennes, J. D. Hess, S. J. Liebowitz, S. E. Margolis, R. B. Palmquist, D. K. Pearce, J. C. Poindexter, Jr., J. W. Rockness, R. J. Rossana, D. A. Sumner, W. J. Wessels, P. F. Williams, J. W. Wilson, M. K. Wohlgenant, G. J. Zuckerman; *Associate Professors Emeriti:* H. G. Gilliam, Jr., C. W. Harrell, Jr.; *Assistant Professors:* M. J. Courchane, E. Cox, L. B. Ferreri, E. Gerstner, A. Hall, S. A. Hatchett, A. E. Headen, P. H. Kupiec, J. W. Levedahl, E. A. McDermid, A. J. McKee, K. Mitchell, C. M. Newmark, R. L. Rucker, W. N. Thurman; *Assistant Professor Emeritus:* J. C. Matthews, Jr.; *Lecturers:* C. G. Allen, A. M. Beals, Jr., E. H. Brooks, E. R. Carraway, M. E. Fisher, T. Goodwin, H. O. Griffin, J. P. Huggard, R. L. Peace, C. J. Skender, L. B. Thorne; *Associate Member of the Faculty:* R. H. Bernhard (Industrial Engineering).

EXTENSION

Professor C. L. Moore, Associate Head and Extension Specialist

Professors: R. D. Dahle, L. E. Danielson, J. E. Easley, Jr., W. D. Eickhoff, H. L. Liner, D. F. Neuman, W. L. Turner, R. C. Wells; *Professors Emeriti:* R. C. Brooks, D. G. Harwood, Jr., T. E. Nichols, C. R. Pugh, C. R. Weathers, J. C. Williamson, Jr.; *Associate Professors:* G. A. Benson, E. A. Estes, C. D. Safley, P. S. Stone, M. L. Walden; *Associate Professors Emeriti:* J. G. Allgood, R. S. Boal, H. A. Homme, D. D. Robinson; *Assistant Professors:* R. N. Collender, D. L. Hoag, J. E. Standaert, K. D. Zering; *Assistant Professor Emeritus:* E. M. Stallings; *Extension Specialists:* S. R. Sutter, R. H. Usry.

The Department of Economics and Business serves agriculture and related industries through extension, research and teaching programs in agricultural economics and agricultural business. These programs apply the principles of economics and related disciplines to the understanding of contemporary economic problems and issues in agriculture, and equip students with a knowledge of the fundamentals of business organization and decision-making skills useful in the management of farms and agricultural business.

The department offers two undergraduate degree programs in the School of Agriculture and Life Sciences, the curriculum in agricultural economics and the curriculum in agricultural business management. Both lead to the Bachelor of Science degree. The agricultural business management program prepares students for management and management training positions in farming operations, small agriculturally-related firms, financial institutions, and agribusiness corporations. The agricultural economics program provides a similar background in economics and business courses, but provides the student the opportunity for more extensive coursework in the basic and applied sciences. For a description of other programs offered by the department, see the listings under the School of Humanities and Social Sciences.

OPPORTUNITIES

The growing number of companies processing and manufacturing agricultural products has created an increasing demand for people trained in agricultural economics. Opportunities include employment by companies handling farm supplies, such as feed, chemicals and equipment; general marketing and processing firms; agricultural cooperatives; professional farm management agencies, banks and other credit agencies.

Many graduates are employed in research and educational work by various agencies of the federal and state governments. These include the Agricultural Extension Service, the Agricultural Research Service, the State Department of Agriculture and other agencies of the United States Department of Agriculture.

CURRICULUM IN AGRICULTURAL BUSINESS MANAGEMENT

	<i>Credits</i>
ALS 103 Introductory Topics in ALS	1
<i>Languages (12 Credits)</i>	
ENG 111 Composition and Rhetoric	3
ENG 112 Composition and Reading	3
SP 110 Public Speaking	3
Elective English or foreign language literature)	3
<i>Humanities and Social Sciences (21 Credits)</i>	
EB 202 Economics II	3
EB 212 Economics of Agriculture	3
Electives (Group D)	15
<i>Physical and Biological Sciences (30 Credits)</i>	
BS 100 General Biology or	
BS 105 Biology of the Modern World	4
CH 101 General Chemistry I	4
CSC 200 Intro. to Computers & Their Uses or	
BAE 241 Computer Applications in Agri. & Life Sci.	3
MA 111 Algebra & Trigonometry	4
MA 112 Analytic Geometry & Calc. A or	
MA 113 Introduction to Calculus	4
MA 114 Introduction to Finite Mathematics	3
PY 221 College Physics	5
Bio. Sci. Elec. (From Group A or	
GN 301, NTR 301 or SSC 200)	3

Physical Education and Free Electives (16 Credits)

PE 100 Health and Physical Fitness	1
Physical Education Electives	3
Free Electives	12

Departmental Requirements and Electives (50 Credits)

ACC 210 Accounting I, or	
ACC 280 Managerial Accounting	3
EB 301 Intermediate Microeconomics	3
EB 302 Intermediate Macroeconomics	3
EB 303 Farm Management, or	
EB 325 Managerial Economics	3
EB 306 Agricultural Law, or	
EB 307 Business Law I	3
EB 311 Agricultural Markets, or	
EB 313 Marketing Methods	3
EB 326 Human Resource Management, or	
EB 332 Industrial Relations, or	
EB 431 Labor Economics	3
EB (ST) 350 Economics and Business Statistics ..	3
EB 415 Farm Appraisal & Finance or	
EB 404 Money, Financial Markets & the Economy, or	
EB 420 Corporation Finance, or	
EB 422 Investments and Portfolio Management ..	3
EB 433 U. S. Agricultural Policy	3
Technical agriculture electives (from Group C or Forestry)	9
Departmental or technical agriculture electives	11

Minimum hours for graduation 130

CURRICULUM IN AGRICULTURAL ECONOMICS

SCIENCE PROGRAM

	<i>Credits</i>
ALS 103 Introductory Topics in ALS	1
<i>Languages (12 Credits)</i>	
ENG 111 Composition and Rhetoric	3
ENG 112 Composition and Reading	3
Elective (English or foreign language literature) ...	3
Elective (English or foreign language)	3
<i>Humanities and Social Sciences (21 Credits)</i>	
EB 202 Economics I	3
EB 212 Economics of Agriculture	3
Electives (Group D)	15
<i>Physical Biological Sciences (37 Credits)</i>	
BS 100 General Biology, or	
BS 105 Biology in the Modern World	4
CH 101 General Chemistry I	4
CH 103 General Chemistry II	4

CSC 200 Introduction to Computers, or	
BAE 241 Computer Applications in Agri. & Life Sci.	3
MA 111 Algebra and Trigonometry	4
MA 114 Introduction to Finite Mathematics	3
MA 112 Analytic Geometry and Calculus A	4
MA 212 Analytic Geometry and Calculus B	3
PY 221 College Physics	5
Bio. Sci. Elec. (From Group A or	
GN 301, NTR 301 or SSC 200)	3

Physical Education & Free Electives (16 Credits)

PE 100 Health and Physical Fitness	1
Physical Education Electives	3
Free Electives	12

Group A and C Electives (11 Credits)

Electives	11
-----------------	----

*Departmental Requirements and Electives
(32 Credits)*

ACC 210	Accounting I, or	
ACC 280	Managerial Accounting	3
EB 301	Intermediate Microeconomics	3
EB 302	Intermediate Macroeconomics	3
EB (ST) 350	Economics and Business Statistics	3
EB 433	U.S. Agricultural Policy	3

Electives (Agricultural Economics, 230, 303, 311, 415, 430, 436, 515, 521, 523, 533, or 551)	9
Electives (Any ACC or EB or other course approved by departmental administration)	8
Minimum hours for graduation	130

ENTOMOLOGY

Gardner Hall (Room 2301)

Professor R. J. Kuhr, Head of the Department

Professor H. B. Moore, Jr., Coordinator of Advising

TEACHING AND RESEARCH

Professors: R. C. Axtell, J. R. Bradley, Jr., W. M. Brooks, W. V. Campbell, W. C. Dauterman, M. H. Farrier, F. E. Guthrie, F. P. Hain, E. Hodgson, G. G. Kennedy, H. H. Neunzig, G. C. Rock, T. J. Sheets, R. E. Stinner, C. G. Wright; *Adjunct Professors:* J. R. Bend, A. L. Chasson, J. R. Fouts, J. E. Gibson, F. L. Hastings, R. A. Neal, R. M. Philpot; *Professors Emeriti:* K. L. Knight, W. J. Mistic, Jr., R. L. Rabb, C. F. Smith, D. A. Young, Jr.; *Associate Professors:* L. L. Deitz, F. L. Gould, D. M. Jackson (USDA), J. R. Meyer, B. M. Parker; *Adjunct Associate Professors:* C. Y. Kawanishi, H. B. Matthews, Jr.; *Assistant Professors:* G. J. House, D. W. Keever (USDA), E. P. Lampert, R. M. Roe; *Adjunct Assistant Professor:* K. G. Wilson; *Associate Members of the Faculty:* B. C. Haning (Plant Pathology), H. M. Linker (Crop Science).

EXTENSION

Associate Professor P. S. Southern, Specialist-in-Charge

Professors: J. S. Bachelier, J. R. Baker, K. A. Sorensen, J. W. Van Duyn; *Professors Emeriti:* G. D. Jones, R. L. Robertson; *Associate Professors:* J. T. Ambrose, C. S. Apperson, R. C. Hillman; *Assistant Professors:* J. J. Arends, R. L. Brandenburg, J. F. Walgenbach; *Extension Specialists:* S. B. Bambara, J. D. DeAngelis, D. L. Stephan, M. B. Tooley.

Undergraduate instruction in entomology is designed to provide introductory and advanced courses in the basic science of entomology and on the management of beneficial and pest insects. These courses serve students majoring in biological sciences, agronomy, horticultural science, pest management, agricultural education, and forestry. They also provide fundamental training for graduate study in entomology (See listing of graduate degrees).

OPPORTUNITIES

For graduates with advanced degrees in entomology, opportunities include research teaching, and extension positions in universities; research, development, production, control, and sales positions in private industries; consultative positions in pest management; and research and regulatory positions with state and federal agencies.

UNDERGRADUATE CURRICULUM

There is no entomology undergraduate major. Students interested in entomology who wish to seek employment after completing a bachelor's degree are advised to enroll in the pest management for crop protection curriculum.

Those students with a primary interest in entomology who plan to go on to graduate studies are advised to take the biological sciences curriculum with the entomology concentration (See curriculum under biological sciences). This requires three courses (10 credits) in entomology in addition to the basic biological sciences requirements.

FISHERIES AND WILDLIFE SCIENCES

Gardner Hall (Room 2115)

Professor R. L. Noble, Coordinator of Advising

See curriculum in Fisheries and Wildlife Sciences under Department of Zoology.

FOOD SCIENCE

Schaub Food Science Building (Room 100)

Professor D. R. Lineback, Head of the Department

Professor V. A. Jones, Coordinator of Advising

TEACHING AND RESEARCH

Professors: L. W. Aurand, H. R. Ball, Jr., D. E. Carroll, Jr., H. B. Craig, H. P. Fleming (USDA), D. D. Hamann, H. M. Hassan, H. N. Jacobson, R. F. McFeeters (USDA), J. L. Oblinger, H. E. Swaisgood, W. M. Walter, Jr. (USDA), C. T. Young; *Adjunct Professor:* R. A. Neal; *Professors Emeriti:* T. A. Bell, T. N. Blumer, M. W. Hoover, I. D. Jones, A. E. Purcell, W. M. Roberts, M. L. Speck, F. G. Warren; *Associate Professors:* G. L. Catignani, Jr., A. P. Hansen, T. R. Klaenhammer, T. C. Lanier, B. W. Sheldon, K. R. Swartzel, L. G. Turner; *Assistant Professors:* L. C. Boyd, M. A. Daeschel (USDA), E. A. Foegeding, P. M. Foegeding, D. K. Larick, S. J. Schwartz; *Associate Members of the Faculty:* H. R. Horton (Biochemistry), H. E. Pattee (Botany), N. F. Tope (Foods and Nutrition).

EXTENSION

Professor F. B. Thomas, Acting In Charge

Professors: M. E. Gregory, F. R. Tarver, Jr., F. B. Thomas; *Professors Emeriti:* J. A. Christian, E. S. Cofer, I. D. Jones, N. C. Miller, Jr.; *Associate Professors:* R. E. Carawan, D. H. Pilkington; *Assistant Professor:* J. E. Rushing; *Specialist:* D. P. Green.

The Department of Food Science provides undergraduate and graduate programs for the application and integration of chemistry, biology, economics and engineering to the development, processing, packaging, quality control, distribution and utilization of foods. The department maintains modern fully-equipped laboratories for teaching and research in the disciplines of food microbiology, food chemistry/biochemistry, food engineering, and nutrition; and the product areas of dairy, fruit, meats, poultry, seafood, and vegetable products.

OPPORTUNITIES

Increasing consumer demands for greater varieties of nutritious and convenience foods of uniformly high quality create many varied career opportunities in the food and allied industries.

Career opportunities in food industries are: management, research and development, process supervision, quality control, procurement, distribution, sales and merchandising. Positions include sales and services in allied industries, consulting and trade association activities and promotional and educational services.

Food Science graduates hold teaching, research and extension positions with colleges and universities. Governmental agencies employ food scientists whose work is directed toward research, regulatory control and the development of food standards.

The food industry provides both merit and financial need scholarships to encourage students preparing for careers in food science. Phi Tau Sigma Honor Society invites outstanding seniors to membership, and all students are encouraged to participate in the Food Science Club, a student branch of the Institute of Food Technologists.

CURRICULA IN FOOD SCIENCE

The Bachelor of Science degree with a major in food science is offered through curricula with a science emphasis or a technology emphasis. The science program is designed for students with interest in graduate school or for those desiring more rigorous science courses

for technical careers in the food industry. Students more interested in business opportunities for technically trained individuals find the technology program permits greater flexibility in complementing food science coursework with business and agricultural commodity courses.

See listing of graduate degrees offered.

SCIENCE PROGRAM

	<i>Credits</i>
ALS 103 Introductory Topics in ALS	1

Languages (12 Credits)

ENG 111 Composition and Rhetoric	3
ENG 112 Composition and Reading	3
Language Elective	6*

Humanities and Social Sciences (21 Credits)

Electives	21*
-----------------	-----

Mathematics and Statistics (14 Credits)

MA 111 Algebra & Trigonometry	4
MA 112 Analytic Geometry & Calc. A	4
MA 212 Analytic Geometry & Calc. B	3
ST 311 Introduction to Statistics	3

Chemistry (19 Credits)

BCH 451 Elementary Biochemistry	3
CH 101 General Chemistry I	4
CH 107 Principles of Chemistry	4
CH 221 Organic Chemistry I	4
CH 223 Organic Chemistry II	4

Biological Sciences (8 Credits)

BS 100 General Biology	4
MB 401 General Microbiology	4

*Any English, foreign language or speech course may be used as language elective. A literature course or 200-level foreign language course must be included in the curriculum.

TECHNOLOGY PROGRAM

	<i>Credits</i>
ALS 103 Introductory Topics in ALS	1

Languages (12 Credits)

ENG 111 Composition and Rhetoric	3
ENG 112 Composition and Reading	3
SP 110 Public Speaking	3
Literature Elective	3

Humanities and Social Sciences (21 Credits)

Electives	21
-----------------	----

Mathematics (11 Credits)

MA 111 Algebra and Trigonometry	4
MA 112 Analytic Geometry & Calc. A or	
MA 113 Introduction to Calculus	4
MA 114 Intro. to Finite Math. with Applications or	
MA 212 Analytic Geometry & Calc. B	3

Chemistry (12-16 Credits)

CH 101 General Chemistry I	4
CH 103 General Chemistry II or	
CH 107 Principles of Chemistry	4

Physics (8 Credits)

PY 211 General Physics	4
PY 212 General Physics	4

Food Science (31 Credits)

FS 201 Food Science and the Consumer	3
FS (ANS, PO) 322 Muscle Foods and Eggs or	
FS (ANS) 324 Milk & Dairy Products or	
FS 423 Muscle Food Technology or	
FS 425 Processing Dairy Products	3
FS 331 Food Engineering	3
FS 400 Principles of Human Nutrition	3
FS 402 Food Chemistry	3
FS 403 Food Analysis	3
FS (MB) 405 Food Microbiology	3
FS 421 Food Preservation	3
FS 490 Food Science Seminar	1
Food Science Electives	6

Physical Education and Free Electives (16 Credits)

PE 100 Health & Physical Fitness	1
Physical Education Electives	3
Free Electives	12

Minimum Hours Required for Graduation .. 130

CH 220 Introduction to Organic Chemistry or	
CH 221 Organic Chemistry I and	
CH 223 Organic Chemistry II	4-8

Biological Sciences (8 Credits)

BS 100 General Biology	4
MB 401 General Microbiology	4

Physics

PY 221 College Physics	5
------------------------------	---

*Groups A, B, C Electives (10-17 Credits)**

Electives	10-17
-----------------	-------

Food Science (27 Credits)

FS 201 Food Science & the Consumer	3
FS 331 Food Engineering	3
FS 402 Food Chemistry	3
FS 403 Food Analysis	3
FS (MB) 405 Food Microbiology	3
FS 416 Quality Control of Food Products	3
FS 421 Food Preservation	3
FS 490 Food Science Seminar	1

Food Science Elective	2	Physical Education Electives	3
Food Processing Elective (FS 322, 324, 423 or 425)	3	Free Electives	12
<i>Physical Education and Free Electives</i> (16 Credits)		Minimum Hours Required for Graduation ...	
PE 100 Health & Physical Fitness	1	130	

*Dependent on whether CH 220 or CH 221-223 and PY 221 or PY 211-212 are elected.

GENETICS

Gardner Hall (Room 3513)

Professor W. R. Atchley, Head of the Department

Professor W. H. McKenzie, Coordinator of Advising

Professors: G. C. Bewley, W. D. Hanson, W. E. Kloos, C. Laurie-Ahlberg, C. S. Levings, III, D. F. Matzinger, R. H. Moll, G. Namkoong (USFS), J. G. Scandalios, C. W. Stuber (USDA), A. C. Triantaphyllou; *Adjunct Professor:* M. D. Chilton; *Professors Emeriti:* C. H. Bostian, D. S. Grosch, T. J. Mann, L. E. Mettler; *Associate Professors:* T. H. Emigh, S. L. Spiker; *Assistant Professors:* M. A. Conkling, S. E. Curtis; *Associate Members of the Faculty:* H. E. Schaffer (Academic Computing), E. J. Eisen, B. T. McDaniel, O. W. Robison (Animal Science); F. B. Armstrong (Biochemistry); W. F. Thompson (Botany), D. A. Emery, E. A. Wernsman, (Crop Science); M. M. Goodman (Crop Science, Statistics, Botany); D. H. Timothy (Crop Science, Botany); C. C. Cockerham, J. O. Rawlings, B. S. Weir (Statistics); T. O. Perry, L. C. Saylor (Forestry); F. L. Haynes, Jr. (Horticultural Science); J. L. Apple (Plant Pathology).

The genetics faculty offers instruction at advanced undergraduate and graduate levels. The undergraduate courses are designed to support other departments, giving students a background in genetics. Since there is no genetics baccalaureate program, interested undergraduates are encouraged to pursue a biological sciences program. The graduate program is designed to train scientists for research and teaching careers in basic genetics and in its application in plant and animal breeding. See listing of graduate degrees offered.

HORTICULTURAL SCIENCE

Kilgore Hall (Room 114)

Professor A. A. De Hertogh, Head of the Department

Professor W. E. Ballinger, Coordinator of Advising

TEACHING AND RESEARCH

Professors: F. A. Blazich, F. L. Haynes, Jr., T. R. Konsler, R. A. Larson, C. H. Miller, T. J. Monaco, P. V. Nelson, D. M. Pharr, J. C. Raulston, C. R. Unrath; *Adjunct Professors:* P. L. Accatino, R. L. Sawyer (Peru); *Professors Emeriti:* F. D. Cochran, J. M. Jenkins, D. T. Pope; *Associate Professors:* J. R. Ballington, Jr., T. E. Bilderback, W. W. Collins, P. R. Fantz, W. C. Fonteno, R. G. Gardner, W. R. Henderson, L. E. Hinesley, W. E. Hooker, M. M. Peet, T. C. Wehner, D. J. Werner, E. Young; *Associate Professor Emeritus:* D. C. Zeiger; *Assistant Professors:* S. M. Blankenship, R. G. Goldy; *Lecturers:* B. H. Lane, M. E. Traer; *Associate Members of the Faculty:* D. E. Carroll, Jr. (Food Science), R. J. Downs, R. L. Mott (Botany), T. J. Sheets (Entomology, Crop Science), R. H. Moll (Genetics), R. J. Volk (Soils)

EXTENSION

Professors: J. F. Brooks, J. W. Love, C. M. Mainland, M. A. Powell, Jr., D. C. Sanders, W. A. Skroch, L. G. Wilson; *Professors Emeriti:* A. A. Banadyga, H. M. Covington, J. H. Harris, G. R. Hughes, M. H. Kolbe; *Associate Professors:* V. P. Bonaminio, K. B. Perry, E. B. Poling, J. H. Wilson, Jr.; *Associate Professors Emeriti:* T. F. Cannon, W. W. Reid; *Assistant Professors:* A. R. Bonanno, W. J. Lamont, K. M. Williams; *Extension Specialists:* L. Bass, R. E. Bir, G. L. Johnson.

Horticulture is a dynamic segment of agriculture. The development, growth, distribution, and utilization of fruits, vegetables, flowers and ornamental plants plus the arts of floral design and landscaping enrich our lives with nutritious foods and more attractive surroundings. North Carolina's varied climatic conditions favor the production of a wide variety of horticultural crops on a commercial scale as well as the development of parks and

gardens. The population and amount of industry in the state are increasing, and with them the use of ornamental plants. Designers skilled in residential and commercial landscape plantscape, and plant maintenance are in demand. All this in turn has created a growth in interest in academic training in horticulture.

Undergraduate programs in horticultural science offer broad training in physical and biological sciences and a sound cultural background. Students can concentrate studies in the areas of ornamentals (nursery management), fruits and vegetable crops, floriculture or landscape horticulture. They are prepared for either graduate study or for diverse professional service.

OPPORTUNITIES

Horticulture graduates fill positions in production, processing, sales and service. Among these are county extension agents; vocational agricultural teachers; landscaping and landscape contracting; farm operators; orchard, nursery, greenhouse and flower shop managers; research, production and promotional specialists with commercial seed, floral, fertilizer, chemical and food companies; inspectors and quality control technologists; USDA specialists and as leaders in other phases of agricultural and industrial developments. The student may also prepare for a career in research, teaching, extension, etc. in horticulture.

CURRICULA IN HORTICULTURAL SCIENCE

The degree of Bachelor of Science with a major in horticultural science can be earned in either science or technology—offered by the School of Agriculture and Life Sciences. Under these curricula, specialized training is offered in fruit and vegetable crops, floriculture, ornamental horticulture (nursery management), and landscape horticulture. (There is also a joint interdepartmental major in pest management for crop protection.) See the freshman year and basic requirements, School of Agriculture and Life Sciences.

TECHNOLOGY PROGRAM

		Credits	Group A and C Courses (21 Credits)		
ALS 103	Introductory Topics in ALS	1	BO 421	Plant Physiology	4
Languages (12 Credits)			ENT 312	Introduction to Economic Entomology	3
ENG 111	Composition and Rhetoric	3	HS 201	Principles of Horticulture	3
ENG 112	Composition and Reading	3	HS 301	Plant Propagation (FV,OH,FL)	4
SP 110	Public Speaking	3	HS 411	Nursery Management (LH)	3
Literature Elective		3	HS 441	Floriculture I (FL)	3
Humanities and Social Sciences Group D (21 Credits)			HS 471	Tree and Grounds Maintenance (LH)	4
Electives (Incl. EB 212)		21	PP 315	Principles of Plant Pathology	4
Physical and Biological Sciences (32-33 Credits)			SSC 341	Soil Fertility and Fertilizers (FV,OH)	3
			Departmental Requirements and Electives (26-34 Credits)		
BO 200	Plant Life	4	DN 234	Intro. to Environmental Design (LH)	3
BS 100	General Biology	4	DN 257	Landsc. Mat'l's & Const. I (LH)	3
CH 101	General Chemistry I	4	DN 430	Site Planning (LH)	3
CH 103	General Chemistry II	4	EB or ACC Elective (FV,OH,FL)		6
MA 111	Algebra and Trigonometry	4	GN 411	Principles of Genetics (FV,OH,FL)	3
MA 112	Analytic Geometry & Calc. A, or		HS 211	Ornamental Plants (OH,LH)	3
MA 113	Intro. to Calculus, or		HS 212	Ornamental Plants (OH,FL,LH)	3
MA 114	Intro. to Finite Math. Appl.	4-3	HS 342	Landscape Horticulture (OH,LH)	3
PY 221	College Physics	5	HS 400	Residential Landscape (LH)	6
SSC 200	Soil Science	4	HS 411	Nursery Management (OH)	3
Physical Education And Free Electives (16 Credits)			HS 416	Princ. Ornamental Plant Design or	
PE 100	Health & Physical Fitness	1	DN 433	Native Plants in Environ. Design (LH)	3
Physical Education Electives		3	HS 421	Tree Fruit Production (FV)	3
Free Electives		12	HS 422	Small Fruit Production (FV)	3
			HS 431	Vegetable Production (FV)	4
			HS 440	Greenhouse Management (FL)	3
			HS 442	Floriculture II (FL)	3

HS 471	Tree and Grounds Maintenance (OH)	..... 4
HS 491	Senior Seminar	..... 1
HS (FS) 562	Post Harvest Physiology (FV)	..... 3
LAR 400	Intermediate Landscape Arch. Design (LH)	..... 6

FV—Fruits & Vegetables, OH—Ornamental, FL—Floriculture, LH—Landscape Horticulture

**Hours Required for Graduation in LH 137.*

SCIENCE PROGRAM

	<i>Credits</i>
ALS 103	Introductory Topics in ALS 1
<i>Languages (12 Credits)</i>	
ENG 111	Composition and Rhetoric 3
ENG 112	Composition and Reading 3
SP 110	Public Speaking 3
	Literature Elective/Foreign Language 3

*Humanities and Social Sciences—
Group D (21 Credits)*

Electives (Incl. EB 212) 21
--------------------------	----------

*Physical and Biological Sciences
(29 Credits)*

BO 200	Plant Life	..... 4
BS 100	General Biology	..... 4
CH 101	General Chemistry I	..... 4
CH 107	Principles of Chemistry	..... 4
MA 111	Algebra and Trigonometry	..... 4
MA 112	Analytic Geometry & Calc. A	..... 4
PY 221	College Physics	..... 5

*Physical Education and Free Electives
(16 Credits)*

PE 100	Health & Physical Fitness	..... 1
	Physical Education Electives	..... 3
	Free Electives	..... 12

FV—Fruits and Vegetables, OH—Ornamentals, FL—Floriculture

Departmental Electives (FV-3-4) (OH-1) (FL-7-8)	..... variable
Minimum Hours Required for Graduation	.. 130*

*Group A and C Courses
(26 Credits)*

BCH 451	Introductory Biochemistry	..... 3
BO 421	Plant Physiology	..... 4
CH 221, 223	Organic Chemistry I, II	..... 8
ENT 312	Intro. to Economic Entomology	..... 3
PP 315	Principles of Plant Pathology	..... 4
SSC 200	Soil Science	..... 4

*Departmental Requirements and Electives
(25 Credits)*

GN 411	The Principles of Genetics	..... 3
GN 412	Genetics Lab	..... 1
HS 201	Principles of Horticulture	..... 3
HS 211	Ornamental Plants I (OH)	..... 3
HS 212	Ornamental Plants II (OH,FL)	..... 3
HS 301	Plant Propagation (OH,FL)	..... 4
HS 411	Nursery Management (OH)	..... 3
HS 421	Tree Fruit Production (FV)	..... 3
HS 422	Small Fruit Production (FV)	..... 3
HS 431	Vegetable Production (FV)	..... 4
HS 440	Greenhouse Management (FL)	..... 3
HS 441	Floriculture I (FL)	..... 3
HS 442	Floriculture II (FL)	..... 3
HS 471	Tree and Grounds Maintenance (OH)	..... 4
HS 491	Hort. Science Seminar	..... 1
HS 562	Post Harvest Physiology (FV)	..... 3
	Departmental Elective (FV-4) (FL-I)	..... variable

Minimum Hours Required for Graduation ...130

INDIVIDUALIZED STUDY PROGRAM

Patterson Hall (Room 115)

Professor J. L. Oblinger, Coordinator of Advising

The individualized study program entails a curriculum planned by the student with the assistance of a faculty advisory committee. Interested students are requested to follow details of the program through the Director of Academic Affairs, 115 Patterson Hall.

MEDICAL TECHNOLOGY

Gardner Hall (Room 1627)

Professor G. C. Miller, Coordinator of Advising

See Science Program in Medical Technology under Department of Zoology.

MICROBIOLOGY

Gardner Hall (Room 4515)

Professor L. W. Parks, Head of the Department

Associate Professor G. H. Luginbuhl, Coordinator of Advising

Professors: W. J. Dobrogosz, G. H. Elkan, J. J. Perry; *Adjunct Professor:* R. E. Kanich; *Professor Emeritus:* J. B. Evans; *Associate Professors:* P. E. Bishop (USDA), R. E. Johnston, J. M. McKenzie, Jr., T. Melton, P. E. Orndorff; *Adjunct Associate Professors:* D. H. King, K. T. Kleeman; *Assistant Professor:* E. S. Miller; *Adjunct Assistant Professor:* W. S. Dallas; *Associate Members of the Faculty:* J. C. Leece (Animal Science), H. M. Hassan, T. R. Klaenhammer (Food Science), W. E. Kloos (Genetics), W. G. Dougherty (Plant Pathology), P. B. Hamilton (Poultry Science), E. V. Debuyscher, F. J. Fuller (Veterinary Medicine).

The microbiology program provides basic preparation for professional microbiologists, a microbiology background for students in other sciences, and an awareness of the microbial world as it relates to our daily lives for non-science majors.

Microbiology is concerned with the growth and development, physiology, classification, ecology, genetics and other aspects of the life processes of an array of microscopic, generally single-celled, organisms. These organisms frequently serve as model systems for elucidation of fundamental processes that are common to all living cells. Most of the major discoveries that have produced the spectacular advances in biology during the past decade have resulted from studies of microbial systems. Future developments in biotechnology, production of food and fuel, and human health, will rely heavily on understanding microbial processes.

OPPORTUNITIES

Microbiologists are employed in university, governmental and industrial research laboratories, diagnostic and control laboratories, teaching, and technical sales and service positions.

CURRICULUM

There is a microbiology option under the biological sciences curriculum. (See curriculum under biological sciences.) This requires three courses (9 credits) in microbiology in addition to MB 401, which is part of the basic biological sciences requirement. (See listing of graduate degree programs.)

PEST MANAGEMENT FOR CROP PROTECTION

Bostian Hall (Room 2705)

Associate Professor B. C. Haning, Program Coordinator and Coordinator of Advising

Pests are organisms that in some way interfere with mankind's health, happiness, or productivity. In fact, some insects, diseases, weeds, and vertebrates become known as pests only by their relationship to people. Consequently, it is important to understand two things about pest problems and their solutions: 1) Many human activities actually induce pest problems, and 2) Many species have multiple roles in nature, some of which are vital to species equilibria and beneficial to mankind's longterm interests. The "ecosystem approach", which considers both the short and longterm consequences of management decisions, most effectively analyzes and resolves pest problems.

Successful management of pest problems requires a thorough understanding of the biology, ecology, sociology, and economics of the problem, and a knowledgeable, responsible use of cultural, biological, and chemical management techniques. The Integrated Pest Management (IPM) concept encompasses these requirements. The Pest Management for Crop Protection curriculum, an interdepartmental program involving the Departments of

Crop Science, Entomology, Horticulture Science, and Plant Pathology as well as other departments and disciplines, provides students opportunity to study the IPM philosophy and component disciplines and technologies. Students study IPM, biology and ecology, economics and sociology, soil science, entomology, plant pathology, weed science, pesticide application, and crop production. Complementary course work in agricultural and forest meteorology, alternative agricultural systems, and computer sciences is available. A required internship further complements classroom experiences. Close student-faculty advising of elective hours permit programs tailored to students' needs. Dual degree programs with related subject areas such as agronomy, soil science, horticultural science, animal science, conservation, zoology, economics and business, and botany are encouraged.

OPPORTUNITIES

Successful completion of this curriculum prepares students well for positions as research assistants, crop scouts, agribusiness personnel, extension agents, pest control operators, gardeners and farmers, inspectors and regulatory agents, and operators and consultants of nursery, greenhouse, and plant and animal facilities. The curriculum is excellent preparation for graduate school as well as a comprehensive exposure to agriculture in general.

CURRICULUM IN PEST MANAGEMENT FOR CROP PROTECTION

The degree of Bachelor of Science with a major in Pest Management for Crop Protection is offered under the agricultural science curriculum of the School of Agriculture and Life Sciences.

See the freshman year and basic requirements School of Agriculture and Life Sciences.

SCIENCE PROGRAM

	<i>Credits</i>				
ALS 103	Introductory Topics in the ALS.....	1	Physical Education Electives	3	
			Free Electives	12	
	<i>Languages (12 Credits)</i>		<i>Group A and C Courses</i>		
ENG 111	Composition and Rhetoric	3	(22 Credits)		
ENG 112	Composition and Reading	3	BO (ZO) 360	Introduction to Ecology	3
Language Elective	3		BO (ZO) 365	Ecology Lab	1
Literature Elective	3		BO 421	Plant Physiology	4
	<i>Humanities and Social Science</i>		CH 220	Introductory Organic Chemistry	4
	(21 Credits)		ENT 312	Intro. to Economic Entomology	3
Electives	21		SSC 200	Soil Science	4
(Must include 3 sem. hrs. economics)			SSC 341	Soil Fertility and Fertilizers	3
	<i>Physical and Biological Sciences</i>		<i>Major Requirements and Electives</i>		
	(24-28 Credits)		(34 Credits)		
BS 100	General Biology	4	CS 211	Introduction to the Crop Plant	2
CH 101	General Chemistry I	4	CS 212	Intro. to Crop Management	2
CH 103	General Chemistry II or		CS 414	Weed Science	4
CH 107	Principles of Chemistry	4	ENT 550	Fund'tls of Insect Control	3
MA 111	Algebra and Trigonometry	4	PM 111	Intro. Integrated Pest Mgmt.	2
MA 112	Analytic Geometry & Calc. A or		PM (BAE) 312	Princ. & Pract. Pesticide Appl.	3
MA 114	Intro. to Finite Mathematics	4-3	PM 490	Pest Management Seminar	2
PY 211, PY 212	General Physics or		PM 415	Princ. & Syst. Intergr. Pest Mgmt.	4
PY 221	College Physics	5-8	PP 315	Principles of Plant Pathology	4
			PP 415	Plant Disease Control	3
			Advised Electives	5	
	<i>Physical Education and Free Electives</i>		Minimum Hours Required for Graduation ...	130	
	(16 Credits)				
PE 100	Health & Physical Fitness	1			

PLANT PATHOLOGY

Gardner Hall (Room 2518)

Professor W. L. Klarman, Head of the Department

TEACHING AND RESEARCH

Professors: J. L. Apple, K. R. Barker, D. F. Bateman, D. M. Benson, M. K. Beute, E. Echandi, G. V. Gooding, Jr., L. F. Grand, A. S. Heagle (USDA), J. S. Huang, K. J. Leonard (USDA), L. T. Lucas, C. E. Main, R. D. Milholland, R. A. Reinert (USDA), H. W. Spurr, Jr. (USDA), D. L. Strider, H. H. Triantaphyllou, N. N. Winstead; *Adjunct Professor:* J. W. Koenigs; *Professors Emeriti:* R. Aycock, C. N. Clayton, D. E. Ellis, T. T. Hebert, G. B. Lucas, L. W. Nielsen, C. J. Nusbaum, J. P. Ross, J. N. Sasser, F. L. Wellman; *Associate Professors:* R. I. Bruck, C. L. Campbell, W. G. Dougherty, B. C. Haning, J. W. Moyer, G. A. Payne, H. D. Shew, T. B. Sutton; *Assistant Professors:* M. E. Daub, S. Leath (USDA), S. M. Schneider (USDA), S. R. Shafer (USDA); *Adjunct Assistant Professors:* J. L. Imbriani (NCDA), S. Spencer (NCDA); *Associate Members of the Faculty:* C. G. VanDyke (Botany), R. C. Rufty (Crop Science), E. B. Cowling, M. P. Levi (Forestry), C. B. Davey (Forestry, Soil Science), J. H. Wilson, Jr. (Horticulture), J. M. Davis (Marine, Earth & Atmospheric Science), W. M. Hagler, Jr. (Poultry Science)

EXTENSION

Professor H. E. Duncan, In Charge

Professors: C. W. Averre, III, R. K. Jones, N. T. Powell, P. B. Shoemaker; *Professors Emeriti:* J. C. Wells, F. A. Todd; *Associate Professors:* J. E. Bailey, D. F. Ritchie, D. P. Schmitt

Undergraduate instruction in plant pathology is designed to provide introductory and advanced courses on the nature and control of plant diseases to students majoring in crop science, horticultural science, pest management, agricultural education and forestry. It also provides fundamental training necessary for graduate study in plant pathology.

The Department of Plant Pathology cooperates in training pest management for crop protection majors, but does not offer an undergraduate major in plant pathology. (See listing of graduate degrees offered.)

OPPORTUNITIES

Employment in research, extension and teaching is available to graduates with advanced degrees in plant pathology. Research openings are with the U. S. Department of Agriculture, state experiment stations and in industry. The rapid development of agricultural chemicals and other methods for disease control offers numerous opportunities. See pest management for crop protection.

POULTRY SCIENCE

Scott Hall (Room 110)

Professor J. E. Marion, Head of the Department

Associate Professor J. F. Ort, Coordinator of Advising

TEACHING AND RESEARCH

Professors: R. E. Cook, W. E. Donaldson, F. W. Edens, J. D. Garlich, P. B. Hamilton, C. H. Hill, C. R. Parkhurst; *Adjunct Professors:* K. N. May, D. I. McRee, J. P. Thaxton; *Professors Emeriti:* C. W. Barber, E. W. Glazener; *Associate Professors:* J. T. Brake, V. L. Christensen, W. M. Hagler, Jr., J. C. H. Shih, T. D. Siopes; *Adjunct Associate Professor:* N. Chernoff; *Assistant Professor:* R. M. Shuman; *Adjunct Assistant Professor:* M. J. Galvin, Jr.; *Associate Members of the Faculty:* H. R. Ball, Jr., B. W. Sheldon (Food Science), D. G. Simmons (Veterinary Medicine).

EXTENSION

Professor T. A. Carter, In Charge

Professors Emeriti: W. G. Andrews, J. R. Harris, G. A. Martin, W. C. Mills, Jr., T. B. Morris; *Associate Professor:* F. T. Jones; *Assistant Professors:* J. B. Carey, M. J. Wineland; *Assistant Professor Emeritus:* J. R. West; *Extension Specialists:* C. E. Brewer, J. N. Caldwell.

The Department of Poultry Science provides instruction in the principles of poultry husbandry and in such related fields as nutrition, physiology, genetics, toxicology and

biotechnology. Through teaching, research and extension, the department serves students, poultrymen and allied industries. Poultry production has increased rapidly during the last two decades and ranks first in North Carolina as a source of agricultural income. North Carolina ranks third nationally in the production of poultry products; the climatic and economic conditions in the state provide a sound base for continued expansion.

OPPORTUNITIES

The change from small-farm operations to large commercial poultry enterprises has created more specialized positions than there are available poultry graduates. Production-oriented positions and off-the-farm operations in activities such as processing and distribution offer new job opportunities. The allied industries—feed, equipment, financing, pharmaceutical and other supplies—need more employees trained in poultry science. Graduates hold positions as managers and field representatives for businesses identified with, or serving the poultry industry. Graduates are also employed in communication and public relations and as teachers and extension and research specialists. Some graduates have their own poultry businesses.

CURRICULA IN POULTRY SCIENCE

Students desiring the Bachelor of Science with a major in poultry science may choose either the science or technology curriculum offered by Agriculture and Life Sciences. (See listing of graduate degrees.) One may obtain a double major in certain other curricula through careful use of electives and/or summer school attendance. The student should consult the undergraduate advisers in the department(s) concerned. Currently, the pre-veterinary science student may utilize all requirements toward a Bachelor of Science degree in the science option.

See the freshman year and basic requirements for School of Agriculture and Life Sciences.

SCIENCE PROGRAM

This curriculum is for the student interested in the basic biological and physical sciences. The student is better prepared for advanced study in various disciplines such as genetics, nutrition, physiology and pathology. Several pre-veterinary students are currently enrolled in this curriculum and are seeking a Bachelor of Science degree in poultry science. (See Pre-Professional Program in Veterinary Medicine).

	<i>Credits</i>		
ALS 103 Introductory Topics in ALS	1	Physical Education Electives	3
		Free Electives	12
<i>Languages (12 Credits)</i>		<i>Group A, B, C Courses</i>	
ENG 111 Composition and Rhetoric	3	<i>(22-26 Credits)</i>	
ENG 112 Composition and Reading	3	CH 221 Organic Chemistry I	4
SP 110 Public Speaking	3	CH 223 Organic Chemistry	4
Literature Elective	3	EB 306 Agricultural Law, or	
		EB 307 Business Law I or	
<i>Humanities and Social Sciences (21 Credits)</i>		ACC 280 Managerial Accounting	3
Electives	21	GN 411 Principles of Genetics	3
		Group A Electives (Biological Science)	4
<i>Physical and Biological Sciences</i>		Group A Electives	1-5
<i>(28-32 Credits)</i>		Group B or C Electives	3
BS 100 General Biology	4	<i>Departmental Requirements and Electives</i>	
CH 101 General Chemistry I	4	<i>(26 Credits)</i>	
CH 107 Principles of Chemistry	4	PO 201 Poultry Science and Production	4
MA 111 Algebra and Trigonometry	4	PO (ANS, FS) 322 Muscle Foods and Eggs	3
MA 112 Analytic Geometry & Cal. A or		PO 405 Avian Physiology	4
MA 113 Elements of Calculus or		PO (ANS, NTR) 415 Comparative Nutrition	3
MA 114 Intro. to Finite Mathematics or		PO 490 Poultry Seminar	1
MA 102 Analytic Geometry & Calc. I	3-4	PO (GN) 520 Poultry Breeding	3
MB 401 General Microbiology	4	PO (ZO) 524 Comparative Endocrinology	4
PY 211-212 General Physics or		VMF 401 Poultry Diseases	4
PY 221 College Physics	8-5	Minimum Hours Required for Graduation ...	130
<i>Physical Education and Free Electives</i>			
<i>(16 Credits)</i>			
PE 100 Health & Physical Fitness	1		

TECHNOLOGY PROGRAM

The technology curriculum in poultry science is designed to prepare students for direct entry into the poultry industry upon graduation; allows a greater selection of courses in the applied science and technology areas; and offers a student both basic and applied knowledge in poultry husbandry which can be used directly in a family poultry operation upon graduation.

	<i>Credits</i>		
ALS 103 Introductory Topics in ALS	1	Physical Education Electives	3
		Free Electives	12
<i>Language (12 Credits)</i>		<i>Group A, B, C Courses</i>	
		<i>(16-20 Credits)</i>	
ENG 111 Composition and Rhetoric	3	CH 220 Introductory Organic Chemistry <i>or</i>	
ENG 112 Composition and Reading	3	CH 221 Organic Chemistry I	4
SP 110 Public Speaking	3	EB 306 Agricultural Law <i>or</i>	
Literature Elective	3	EB 307 Business Law I <i>or</i>	
<i>Humanities and Social Sciences</i>		ACC 280 Managerial Accounting	3
<i>(21 Credits)</i>		GN 411 The Principles of Genetics	3
Electives	21	Electives in A, B, or C Courses	6-10
<i>Physical and Biological Sciences</i>		<i>Departmental Requirements and Electives</i>	
<i>(32-36 Credits)</i>		<i>(28 Credits)</i>	
BS 100 General Biology	4	PO 201 Poultry Science and Production	4
CH 101 General Chemistry I	4	PO 301 Evaluation of Live Poultry	2
CH 103 General Chemistry II <i>or</i>		PO (ANS, FS) 322 Muscle Foods and Eggs	3
CH 107 Principles of Chemistry	4	PO 405 Avian Physiology	4
MA 111 Algebra and Trigonometry	4	PO (ANS, NTR) 415 Comparative Nutrition	3
MA 112 Analytical Geometry & Calc. A <i>or</i>		VMF 401 Poultry Diseases	4
MA 113 Elements of Calculus <i>or</i>		Select a minimum of two courses from:	4
MA 114 Introd. to Finite Mathematics <i>or</i>		PO 420 Turkey Production (2)	
MA 102 Analytical Geometry & Calc. I	3-4	PO 421 Commercial Egg Production (2)	
MB 401 General Microbiology	4	PO 422 Incubation and Hatchery Management (2)	
PY 221 College Physics <i>or</i>		PO 423 Broiler Production (2)	
PY 211-212 General Physics	5-8	PO 490 Poultry Seminar	1
Elective in Group A (Biological Science)	4	PO (GN) 520 Poultry Breeding	3
<i>Physical Education and Free Electives</i>		Minimum Hours Required for Graduation ...	
<i>(16 Credits)</i>		130	
PE 100 Health and Physical Fitness	1		

PREMEDICAL SCIENCES

Premedical, preidental, preoptometry, prepharmacy, preveterinary, and other allied health preprofessional programs are offered as foundation courses in several curricular tracks with emphasis on the physical and biological sciences. Requirements for most premedical sciences are similar. A number of students are accepted each year in leading medical colleges; several have received outstanding scholarships.

For the premedical, preidental, and preoptometry programs, see zoology, biochemistry and the biological sciences curricula and consult Dr. William C. Grant, Department of Zoology, Chairman of the University Preprofessional Health Science Committee.

SOCIOLOGY AND ANTHROPOLOGY

(Also see Humanities and Social Sciences)

1911 Building (Room 337)

Professor L. B. Otto, Head of the Department

Professor W. B. Clifford, Associate Head for SALS Programs, Research and Teaching

Professor P. N. Reid, Director of Social Work

Associate Professor M. L. Walek, Assistant Head of the Department and Coordinator of Advising

Associate Professor A. C. Davis, Coordinator of Advising (Applied Sociology)

Professor R. L. Moxley, Graduate Administrator

TEACHING AND RESEARCH

Professors: L. R. Della Fave, V. A. Hiday, C. P. Marsh, M. M. Sawhney, E. M. Suval, O. Uzzell, R. C. Wimberley; Adjunct Professor: R. D. Mustin; Professors Emeriti: L. W. Drabick, H. D. Rawls, J. N. Young; Associate Professors: M. P. Atkinson, R. C. Brisson, J. C. Leiter; G. S. Nickerson, W. C. Peebles-Wilkins, I. Rovner, M. D. Schulman, R. J. Thomson, K. M. Troost, J. M. Wallace, E. M. Woodrum, M. T. Zingraff; Associate Professors Emeriti: J. G. Peck, I. E. Russell; Assistant Professors: J. S. Brown, C. G. Dawson, R. S. Ellovich, G. D. Hill, F. M. Howell, T. M. Hyman, B. J. Risan, D. T. Tomaskovic-Devey, L. R. Williams.

EXTENSION

Associate Professor S. K. Garber, Acting Specialist in Charge

Professors: V. E. Hamilton, T. N. Hobgood, Jr.; Professors Emeriti: J. N. Collins, M. E. Voland; Associate Professors: S. K. Garber, S. C. Lilley; Associate Professor Emeritus: P. P. Thompson.

This department teaches students the principles and techniques for understanding human group behavior. Most specifically the department seeks: (1) to educate students to understand communities and organizations and the people who live and work within them; (2) to qualify exceptional students at the undergraduate and graduate level for sociological research, teaching, and extension careers; (3) to solve problems in human group relations. Applied sociology is good training for a wide variety of careers. It is useful for any job which involves work with people, organizations or communities. It is also good preparation for professional careers in local government, personnel relations, law, the clergy, business and management.

CURRICULUM IN APPLIED SOCIOLOGY

The degree of Bachelor of Science with a major in applied sociology is offered under the science curriculum of the School of Agriculture and Life Sciences. In addition to topics in agricultural and community sociology, majors in this department have the option of concentrating in criminal justice.

SCIENCE PROGRAM

	Credits	Physical and Biological Sciences (30 Credits)
ALS 103 Introductory Topics in ALS	1	
Languages (12 Credits)		
ENG 111 Composition and Rhetoric	3	BS 100 General Biology or
ENG 112 Composition and Reading	3	BS 105 Biology in the Modern World
Language or Speech Elective	3	CH 111 Foundations of Chemistry or
Literature Elective	3	CH 101 General Chemistry I
Humanities and Social Sciences (21 Credits)		CSC 200 Intro. to Computers and Their Uses or
ANT 252 Cultural Anthropology	3	CSC Elective
EB 201 Economics I or		MA 111 Algebra and Trigonometry
EB 212 Economics of Agriculture	3	MA 112 Analytic Geometry & Calc. A or
PS 202 State and Local Government or		MA 102 Analytic Geometry and Calculus I
PS 201 Introduction to American Government	3	PY 221 College Physics
SOC 202 Principles of Sociology	3	ST 311 Introduction to Statistics
Electives (Six hours must come from History, University Studies or any Group D, Area III Discipline)	9	Physical or Biological Science Elective
		Physical Education and Free Electives (16 Credits)
		PE 100 Health and Physical Fitness
		Physical Education Elective
		Free Electives

Group A, B, C, D Courses
(23 Credits)

ANT 251	Physical Anthropology	3
GN 301	Genetics in Human Affairs or	
GN 411	The Principles of Genetics	3
SOC 351	Population and Planning	3
Electives in A, B, C, or D Courses		14

Departmental Requirements and Electives
(27 Credits)

SOC 241	Rural Society, USA	3
---------	--------------------------	---

SOC 301	Human Behavior	3
SOC 311	Community Relationships	3
SOC 342	Rural Societies Around World	3
SOC 410	Formal Organizations	3
SOC 415	Social Thought	3
SOC 416	Research Methods	3
SOC 495	Ind. Field Work in Applied Soc.	3
SOC Elective at 400 level or above		3
Strongly Recommended: For students interested in applied quantitative methods, PS 471, SOC 590 and additional courses in statistics.		

Minimum Hours Required for Graduation ... 130

CONCENTRATION IN CRIMINAL JUSTICE

Social Sciences and Humanities
(21 Credits)

ANT 252	Cultural Anthropology	3
EB 201	Economics I or	
EB 212	Economics of Agriculture	3
PS 201	Introduction to American Government ...	3
PS 311	Criminal Justice Policy Process	3
SOC 202	Principles of Sociology	3
Electives from History, University Studies or any Group D, Area III discipline		6

Group A, B, C, D Courses
(23 Credits)

ANT 251	Physical Anthropology	3
GN 301	Genetics in Human Affairs or	
GN 411	The Principles of Genetics	3

Political Science Elective	3
SOC 306 Criminology	3
SOC 351 Population and Planning	3
SOC (PS) 413 Criminal Justice Field Work	4
Electives	4

Departmental Requirements
(27 Credits)

SOC 241	Rural Society, USA	3
SOC 301	Human Behavior	3
SOC 342	Rural Soc. Around World	3
SOC 415	Social Thought	3
SOC 416	Research Methods	3
Criminal Justice Electives		12
(must include one course in Sociology and one course in Political Science ... See adviser for listing.)		

SOIL SCIENCE

Williams Hall (Room 2234)

Professor R. H. Miller, Head of the Department

Associate Professor H. J. Kleiss, Coordinator of Advising

TEACHING AND RESEARCH

Professors: S. W. Buol, D. K. Cassel, F. R. Cox, G. A. Cummings, C. B. Davey, J. W. Gilliam, W. A. Jackson, E. J. Kamprath, C. B. McCants, G. S. Miner, C. D. Raper, Jr., P. A. Sanchez, R. J. Volk, S. B. Weed, A. G. Wollum; *Professors Emeriti:* W. V. Bartholomew, R. W. Cummings, J. W. Fitts, W. G. Woltz, W. W. Woodhouse, Jr.; *Associate Professors:* D. W. Israel (USDA), L. D. King, R. E. McCollum, J. E. Shelton, M. J. Vepraskas; *Adjunct Associate Professor:* D. W. Eaddy; *Associate Professors Emeriti:* W. D. Lee, W. H. Rankin; *Assistant Professors:* A. Amoozegar-Fard, S. W. Broome, H. P. Denton, G. D. Hoyt, C. K. Martin, T. J. Smyth; *Assistant Professor Emeritus:* L. E. Aull; *Senior Researcher:* W. P. Robarge; *Instructor:* P. A. McDaniel; *Associate Members of the Faculty:* E. D. Seneca (Botany), H. L. Allen, Sr., R. Lea, L. A. Morris (Forestry), S. R. Shafer, (USDA), (Plant Pathology), R. W. Skaggs (Biological & Agricultural Engineering), J. B. Weber (Crop Science).

EXTENSION

Professor J. V. Baird, In Charge

Professors: M. G. Cook, J. A. Phillips; *Associate Professors:* J. P. Lilly, G. C. Naderman, Jr.; *Assistant Professor:* M. T. Hoover.

The Department of Soil Science trains students in fundamentals of soils, develops an understanding and appreciation of soils as a resource, and presents principles of soil management and utilization for both farm and non-agricultural purposes. Soils constitute one of the largest capital investments in farming and proper soil management is essential for efficient production. Future world food needs will require people conversant in soil resources and use of fertilizers. Soil properties are important considerations in urban-suburban planning and development. Also, knowledge of soil and its interactions with

potential pollutants is useful in conserving environmental quality. Therefore, the demand for people trained in soils by agribusiness, research, service, planning-development, education and conservation-related agencies should continue to be great.

OPPORTUNITIES

Soil science graduates fill positions of leadership and service in agricultural, conservation and resource planning work. Among these are opportunities as farm operators and managers, county agricultural extension agents and employees of other public advisory agencies, Soil Conservation Service and other conservation-related agencies concerned with soil resources, and as technical representatives and salesmen in fertilizer companies and other agribusiness.

Provision is made for students wishing a more thorough training in biological sciences, chemistry, mathematics and physics leading to graduate study. (See listing of graduate degrees.) Students with advanced degrees have wide opportunities in teaching, research, service and extension with state, federal and private educational and research institutions and agencies. Also, there are increasing opportunities in support of agribusiness.

SOIL SCIENCE CONCENTRATION

The Bachelor of Science degree may be obtained through programs in agronomy and conservation. The agronomy program is administered jointly with the Crop Science Department. A soil science concentration is available in the agronomy curriculum. (The agronomy and conservation curricula are shown earlier under School of Agriculture and Life Sciences).

PRE-PROFESSIONAL PROGRAM IN VETERINARY MEDICINE

Students with interests in veterinary medicine who enroll in the undergraduate programs at North Carolina State University should pursue a baccalaureate degree in a major area that fulfills the requirements of the pre-professional program. Pre-professional courses are designed to give students a background in animal health, poultry health and laboratory animal care. At the present time a preveterinary curriculum is offered in the School of Agriculture and Life Sciences. A student may major in animal science, poultry science, biochemistry, zoology, biological sciences, or biological sciences options, as well as in other science curricula. The choice of the degree program should be carefully considered to encompass alternate career objectives. If a student is accepted to veterinary school before completion of his or her undergraduate degree, some course credits may be transferred from the veterinary program toward completion of the Bachelor of Science degree. Arrangements for this procedure should be made with the degree-granting school or department prior to entering veterinary school.

The courses listed below are minimum requirements for all students applying for entrance to the School of Veterinary Medicine at N. C. State University. A grade of C or better on each course and an overall grade point average of 2.75 or above is required for application.

<i>Languages</i>	<i>Credits</i>
ENG 111, 112 English Composition	6
<i>Humanities and Social Sciences</i>	
as per appropriate curriculum requirement	
<i>Physical Sciences</i>	
BCH 451 Introduction to Biochemistry	3
CH 101 General Chemistry	4
CH 107 Principles of Chemistry	4
CH 221, 223 Organic Chemistry I & II	8
MA 112 Analytical Geometry & Calc. A or	
MA 113 Intro. to Calculus	4

PY 211, 212	General Physics or	
PY 221	College Physics	8-5
ST 311	Introduction to Statistics	3
<i>Biological Sciences</i>		
BS 100	General Biology	4
GN 411	The Principles of Genetics	3
MB 401	General Microbiology	4
<i>Nutrition</i>		
At least one course in animal nutrition is necessary.		
ANS (PO) 204	Feeds and Feeding or	
ANS (NTR, PO) 415	Comparative Nutrition	4-3
ANS (FS, NTR) 301	Modern Nutrition	

Faculty advisors have a list of suggested courses for pre-professional students.

ZOOLOGY

Gardner Hall (Room 1627—South Wing)

Professor J. G. Vandenberg, Head of the Department

Professor G. C. Miller, Coordinator of Advising

Professors: G. T. Barthalmus, P. C. Bradbury, B. J. Copeland, P. D. Doerr, W. C. Grant, M. T. Huish (USDI), C. F. Lytle, J. M. Miller, R. L. Noble, J. F. Roberts, D. E. Smith, H. A. Underwood; *Adjunct Professors:* F. A. Cross, J. B. Funderburg, Jr., J. D. Hair, G. R. Huntsman; *Professors Emeriti:* D. E. Davis, W. W. Hassler, T. L. Quay; *Associate Professors:* B. L. Black, M. N. Feaver, R. M. Grossfield, J. H. Kerby (USDI), S. C. Mozley, R. A. Powell, L. A. Real, G. J. San Julian; *Adjunct Associate Professors:* R. L. Ferguson, D. E. Hoss, C. S. Manooch, III, D. S. Peters, L. W. Reiter, R. M. Shelley, G. W. Thayer; *Assistant Professors:* L. B. Crowder, J. M. Hinshaw, R. G. Hodson, D. M. Miller, III, J. A. Rice, J. R. Walters; *Adjunct Assistant Professors:* S. V. Chiavetta, D. R. Colby, R. J. Kavlock; *Adjunct Instructors:* W. D. Baker, R. B. Hamilton; *Associate Members of the Faculty:* R. A. Lancia (Forest Resources), K. H. Pollock (Statistics), T. G. Wolcott (Marine, Earth and Atmospheric Sciences).

Affiliated Faculty, Medical Technology Programs

Bowman Gray School of Medicine/N. C. Baptist Hospital—

Michael O'Connor, M.D., Medical Director

Lenora Flynn, MT(ASCP), A.B., M.Ed.

Charlotte Memorial Hospital and Medical Center—

Henry Wilkenson, M.D., Medical Director

Elizabeth T. Anderson, MHD, MT(ASCP), CLS(NCA), Program Director

Duke University Medical Center—

Frances K. Widmann, M.D., Medical Director

Margaret Schmidt, MT(ASCP), SH, CLS(NCA), M.A., Program Director

Mercy Hospital—

Sanford P. Benjamin, M.D., Medical Director

Sister Mary Matthew Snow, M.A.T. MT(ASCP), Program Director

The Department of Zoology provides undergraduate and graduate instruction in specialized biological sciences areas. Undergraduates study all levels of biological organization from the molecular to the community. Zoology majors are well prepared for graduate work in zoology and related fields of sciences. (See listing of graduate degrees.) Participation in supervised programs of research is strongly encouraged. A strong science background is provided for students planning to enter dentistry, medicine, optometry, veterinary medicine and allied health sciences, such as medical technology. Ecology, including wildlife, fisheries, parasitology and marine biology are strong areas. Cellular and molecular biology, including neurobiology, also are emphasized.

OPPORTUNITIES

Bachelor of Science graduates in zoology have many career options. Graduates are well prepared for employment in various government agencies or private industries. Graduates may continue their education with studies leading to advanced degrees in many areas of biological sciences such as zoology, cell biology, wildlife and fisheries science, marine science and biomedical subdisciplines. Many also choose to enter professional schools for degrees in medicine, dentistry, veterinary medicine and other health related areas.

UNDERGRADUATE CURRICULA

The Bachelor of Science degree with a major in zoology, fisheries and wildlife sciences or medical technology is offered under the science curriculum of the School of Agriculture and Life Sciences. Within these majors a student may specialize depending upon interest and ability.

The zoology curriculum prepares students for graduate school, medical, dental, and veterinary schools. Certain professional schools have specific requirements which differ slightly from the zoology curriculum. Students should consult catalogs of specific professional schools to ensure completion of any special requirements.

Other curricula include the fisheries and wildlife sciences program and the medical technology program. The clinical year for the medical technology program is taken by competitive selection at an affiliated hospital. Students are advised by faculty in their special areas of interest.

CURRICULUM IN ZOOLOGY*

		Credits	Physical Education and Free Electives (16 Credits)		
ALS 103	Introductory Topics in ALS	1	PE 100	Health and Physical Fitness	1
			Physical Education Electives		3
			Free Electives		12
			Group A Courses (28 Credits)		
ENG 111	Composition and Rhetoric	3	CH 221, CH 223	Organic Chemistry I, II	8
ENG 112	Composition and Reading	3	GN 411	The Principles of Genetics	3
Language Elective		3	Restricted Electives		17
Literature Elective		3	Departmental Requirements and Electives (24 Credits)		
Social Sciences and Humanities (21 Credits)			BO (ZO) 360	Introduction to Ecology	3
Electives (no more than two courses in any one department)		21	BO (ZO) 365	Ecology Lab	1
			ZO 302, ZO 303	Invertebrate Zoology, Vertebrate Zoology	8
Physical and Biological Sciences (28 Credits)			ZO 361	Principles of Embryonic Development	3
BS 100	General Biology	4	ZO 415	Cellular & Animal Physiology Lab	2
CH 101	General Chemistry I	4	ZO 421	Principles of Physiology or	
CH 107	Principles of Chemistry	4	ZO 414	Cell Biology	3
MA 111	Algebra and Trigonometry	4	Zoology Electives		4
MA 112	Analytic Geometry & Calc. A	4	Minimum Hours Required for Graduation		130
PY 211, 212	General Physics	8			

*NOTE: This curriculum is to be changed in 1987. Consult the department for new curriculum requirements.

SPECIFIC RECOMMENDATIONS FOR RESTRICTED ELECTIVES

- (SDM) Medical Schools and Dental Schools:
ZO 315, 323, 345; BCH 451; GN 412; MB 401, 411; CH 315 (required by most dental schools)
- (SZO) Zoology:
BO 200; BCH 451; ENT 425; FW 221, 420; MB 401, 411; GN 412; ZO 212, 221, 315, 323, 410, 420, 425, 441 and any 500 level course; and any approved computer science, statistics, or mathematics course.

(See also Pre-Professional Program in Veterinary Medicine).

SCIENCE PROGRAM IN MEDICAL TECHNOLOGY

Professor G. C. Miller, Coordinator of Advising

Two programs are available in medical technology. The first is a four-year collegiate curriculum with a Bachelor of Science degree in zoology (see above) followed by a year of training in any hospital clinical laboratory approved by the American Medical Association. The second program is designed to be completed in four calendar years. The student takes the prescribed curriculum (see below) for three years at North Carolina State University and a fourth year (12 months) of clinical training at an affiliated hospital. Successful completion of this program qualifies the student for a Bachelor of Science degree in medical technology from N. C. State. Acceptance by the clinical laboratory is competitive and

students in either program outlined above must apply for clinical training. After completion of either program the student is eligible to take the national examination for certification as a registered Medical Technologist.

	<i>Credits</i>
ALS 103 Introductory Topics in ALS	1

Languages (12 Credits)

ENG 111 Composition & Rhetoric	3
ENG 112 Composition & Reading	3
English, Speech, or Language Elective	3
Literature Elective	3

*Humanities and Social Sciences
(21 Credits)*

Electives (no more than two courses in any one department)	21
---	----

*Physical and Biological Sciences
(28 Credits)*

BS 100 General Biology	4
CH 101 General Chemistry I	4
CH 107 Principles of Chemistry	4
MA 111 Algebra and Trigonometry	4
MA 112 Analytic Geometry & Calc. A	4
PY 211, 212 General Physics	8

*Physical Education and Free Electives
(8 Credits)*

PE 100 Health and Physical Fitness	1
Physical Education Electives	3
Free Electives	4

*Group A Courses
(19 Credits)*

CH 221, 223 Organic Chem. I & II	8
--	---

GN 411 The Principles of Genetics or	
GN 301 Genetics in Human Affairs	3
MB 401 General Microbiology	4
MB 411 Medical Microbiology	4

*Departmental Requirements and Electives
(11 Credits)*

ZO 201 General Zoology	4
ZO 303 Vert. Zoology	4
ZO 414 Cell Biology or	
ZO 421 Principles of Physiology	3

100

plus
Twelve-month course in Medical
Technology at one of the affiliated
hospital programs.
Microbiology
Clinical Chemistry
Hematology 35-50 hours
Histology & (variable in the
Cytology four programs)

Minimum Hours Required for Graduation 135

The affiliated programs are:
Bowman Gray School of Medicine, Winston-Salem, N.C.
Charlotte Memorial Hospital, Charlotte, N.C.
Mercy Hospital, Charlotte, N.C.
Duke Univ. Medical Center, Durham, N.C.

FISHERIES AND WILDLIFE SCIENCES

Professor R. L. Noble, Coordinator of Advising

The Departments of Zoology and Forestry jointly administer the program in Fisheries and Wildlife Sciences. Undergraduate education emphasizes ecological principles and their application to research problems and natural resource management needs. Majors are well prepared for graduate work and entry-level professional positions.

	<i>Credits</i>
ALS 103 Introductory Topics in ALS	1

Languages (12 Credits)

ENG 111 Composition & Rhetoric	3
ENG 112 Composition & Reading	3
ENG 321W Communication of Technical Information	3
SP 110 Public Speaking	3

Humanities and Social Sciences (21 Credits)

Economics Electives	6
Literature Elective	3
Political Science Electives	6
Electives	6

Physical and Biological Sciences (49 Credits)

BO (ZO) 360 Introduction to Ecology	3
BO (ZO) 365 Ecology Lab	1
BS 100 General Biology	4
CH 101 General Chemistry I	4
CH 107 Principles of Chemistry	4

CH 221 and CH 223	Organic Chemistry I and II or	
CH 220	Introductory Organic Chemistry and Physical	
Science Elective (4 hours)		8
GN 411	Principles of Genetics	3
MA 112	Analytic Geometry and Calculus A	4
PY 221	College Physics	5
ST 311	Introduction to Statistics and <i>one of the following</i> :	3
BM 511, FOR 273, MA 212, MA 214		6
ZO 201	General Zoology	4
ZO 421	Principles of Physiology	3

Physical Education and Free Electives (13 Credits)

PE 100	Health and Physical Fitness	1
Physical Education Electives		3
Electives		9

*Group A, B, C Courses
(9 hours, wildlife) (12 hours, fisheries)*

	Credits	Fisheries	Wildlife
ANS (PO, NTR) 415	Comparative Nutrition	3	X
ANS 502	Reproductive Physiology of Vertebrates	3	X
BO 565	Plant Community Ecology	4	X
BO 570	Quantitative Ecology	3	X
BO 574	Phycology	3	X
CE 486	Sanitary Engineering Measurements of		
Water Quality	3	X	
ENT (ZO) 425	General Entomology	3	X
FOR 210	Dendrology-Gymnosperms	2	X
FOR 211	Dendrology-Angiosperms	2	X
FOR 272	Forest Mensuration	3	X
FOR 353	Air Photo Interpretation	3	X
FOR 472	Renewable Resource Management	3	X
FOR 501	Forest Influences and Watershed Management	3	X
FOR 591	Forestry Problems	3	X
FW (ZO) 515	Growth and Reproduction of Fishes	3	X
FW (ZO) 554	Wildlife Field Studies	3	X
FW (ZO) 586	Aquaculture I	3	X
FW (ZO) 587	Aquaculture I Laboratory	1	X
MB 501	Advanced Microbiology I	3	X
MEA 200	Introduction to the Marine Environment	3	X
MEA (ZO) 520	Principles of Biological Oceanography	3	X
RRA 442	Wildland Recreation Environments	3	X
SSC 200	Soil Science	4	X
SSC 452	Soil Classification	4	X
ZO 315	General Parasitology	3	X
ZO 323	Comparative Anatomy	4	X
ZO 441	Biology of Fishes	3	X
ZO 442	Biology of Fishes Laboratory	1	X
ZO 501	Ornithology	3	X
ZO 510	Adaptive Behavior of Animals	4	X
ZO 517	Population Ecology	3	X
ZO 419	Introduction to Limnology	4	X
ZO 544	Mammalogy	3	X

*Departmental Requirements and Electives
(32 hours, wildlife) (29 hours, fisheries)*

	Credits	Fisheries	Wildlife
BO 200	Plant Life	4	X
BO 403	Systematic Botany	4	X
FW (ZO) 221	Conservation of Natural Resources	3	X
FW (FOR) 310	Fisheries and Wildlife Inventory		
& Management	6	X	X
FW (ZO) 353	Wildlife Management	3	X
FW (FOR) 404	Forest Wildlife Management	3	X
FW (ZO) 420	Fishery Science	3	X
FW (FOR) 430	Fish and Wildlife Administration,		
Policy and Law	3	X	X
FW (ZO) 553	Principles of Wildlife Science	3	X
ZO 441	Biology of Fishes	3	X
ZO 442	Biology of Fishes Laboratory	1	X
ZO 419	Introduction to Limnology	4	X

Minimum Hours Required for Graduation 136

AGRICULTURAL RESEARCH SERVICE

D. F. Bateman, *Dean of Agriculture and Life Sciences and Acting Director of Research*

G. J. Kriz, *Associate Director of Research*

R. E. Cook, *Assistant Director of Research*

W. H. Johnson, *Assistant Director of Research*

The North Carolina Agricultural Research Service is the agricultural, forestry, and home economics research agency of the State of North Carolina. It is funded principally by appropriations from the North Carolina General Assembly and the federal government.

The purpose of the Agricultural Research Service is to conduct research on (1) the development and maintenance of an effective agricultural and forestry industry in North Carolina, including economically sound sources of supplies and equipment needed in agriculture and forestry and market outlets for the products of agriculture and forestry, (2) the improvement of rural homes, rural life and rural environment, and (3) the maintenance of a reliable supply of agricultural and forestry products for the consuming public. This requires research to solve current problems and research to provide a foundation of scientific knowledge in the biological, physical and social sciences.

The Agricultural Research Service faculty brings well-trained personnel to the university, whose teaching in many specialized fields of agriculture and biological sciences assures the maintenance of curricula of high standards. It contributes to the advanced training of students who are destined to become the leaders, teachers and investigators necessary in the maintenance of agriculture and forestry on a sound economic plane.

PUBLICATIONS

The Agricultural Research Service publishes bulletins and scientific papers on research results conducted by the staff. Copies of bulletins may be obtained from the Department of Agricultural Communications and scientific papers from the author.

SERVICES

The faculty of the Agricultural Research Service conduct original and other research bearing directly on and contributing to the establishment and maintenance of permanent and effective agricultural and forestry industries in North Carolina. This research includes field and laboratory experimentation in the biological, physical, social, and environmental sciences. Primary emphasis is given to the production, processing, distribution, and consumption of the many agricultural and forestry commodities produced throughout the state. Also, major attention is given to research programs aimed at improving the quality of life of both rural and urban peoples.

AGRICULTURAL EXTENSION SERVICE

D. F. Bateman, *Dean of the School of Agriculture and Life Sciences*

C. D. Black, *Associate Dean and Director of the Agricultural Extension Service*

R. C. Wells, *Associate Director of Extension*

The Agricultural Extension Service of North Carolina State University is a cooperative undertaking among the United States Department of Agriculture, the State of North Carolina, the 100 counties in the state and the Cherokee Indian Reservation. Its work is supported by federal funds made available under the Smith-Lever Act of 1914, as amended, by state and county appropriations, and by grants and contracts.

The federal and state appropriations are used to maintain an administrative and specialist staff and to pay a portion of the salary and the travel expenses of the county extension agents. Under this cooperative arrangement, the Agricultural Extension Service serves as

the "educational arm" of the United States Department of Agriculture, and as the "field faculty" of North Carolina State University in the areas of agriculture and natural resources; family living; 4-H and youth; and, community and rural development.

The primary purpose of the North Carolina Agricultural Extension Service is to take to the people of the state the latest and best information obtainable—particularly that which is related to agriculture and natural resources; home economics and youth; and, rural development—and help them to interpret and use this information in building a more prosperous and satisfying life.

This program has sufficient flexibility to permit special attention to the problems, needs and interests of the people in each county. County Advisory Councils are utilized to determine and prioritize the county educational program content. Assistance is given to individuals, families, communities, agricultural and seafood processing and marketing firms, other businesses and certain organizations. This includes work with adults and youth in both the city and rural areas.

In carrying out this educational program, a variety of methods and techniques are employed: method and result demonstrations; meetings; visits to farms, homes and businesses; organized groups of men, women and youth; tours; leaflets, pamphlets and other printed materials and mass media.

The basic sources of information to be taught through this educational program are the findings and recommendations resulting from research conducted by the Agricultural Research Service in this and other states and by the United States Department of Agriculture.

AGRICULTURAL INSTITUTE

Patterson Hall (Room 107)

D. F. Bateman, *Dean of Agriculture and Life Sciences*

J. L. Oblinger, *Associate Dean and Director of Academic Affairs*

H. B. Craig, *Associate Director of Academic Affairs and Director of the Agricultural Institute*

The Agricultural Institute is a two-year, terminal academic program which provides education and training in food, agriculture, horticulture, turfgrass management and agribusiness. It is part of the School of Agriculture and Life Sciences at North Carolina State University. This program was begun in 1959 and was funded by legislative appropriation. Its objective is to train those desiring a comprehensive education in the food and agricultural sciences and agribusiness.

Individuals with institute training command attractive salaries, assume a more prominent role of leadership and become a distinct asset to various segments of the industry related to food and agriculture. They make significant contributions to their community, state and nation by being involved in the world's most vital industry.

The instructional programs are organized and conducted as a part of the over-all resident instruction program for agriculture and life sciences. The institute is an addition to and not a substitute for, the school's regular degree granting program. However, the faculty in residence for the four-year programs are responsible for organizing and teaching courses offered by the institute.

People with training similar to that of the institute are in demand by food and agricultural industries. As demand changes, courses will be evaluated and alterations will be made accordingly. Such a re-evaluation also aids the technical manpower needs of industry.

OPPORTUNITIES

Rapid technical advancement has been important in changing agriculture from a small production industry to the nation's largest industry. Closely associated with production agriculture are those areas related to recreation and beautification such as turfgrass management, flowers and ornamental plants. Increased production and consumer demand

for convenience-type foods have stimulated the food processing industry, in turn increasing food distribution requirements.

Today's complex agriculture requires a larger work force. This work force must be able to deal with a vast array of problems and opportunities and institute graduates can assume responsible positions in the total agricultural industry. Some career examples are: agricultural lending institution agent, farm and herd managers, research technicians, salesmen, retail farm supply and equipment outlet managers, golf course superintendents, nursery managers, agricultural pest control specialists, quality control technicians, food service supervisors and others. More job opportunities than graduates make salaries attractive.

The school maintains a Placement Office to assist graduates in finding employment.

ENTRANCE REQUIREMENTS

Any individual who has received a diploma from an accredited high school or has passed the high school equivalency examination administered by the State Department of Public Instruction is eligible for admission consideration. Each application will be reviewed and evaluated by the Institute Director.

For additional information write: Director, Agricultural Institute, Box 7601, 107 Patterson Hall, N.C. State University, Raleigh, N.C. 27695-7601, Telephone (919) 737-3248.

PROGRAMS OF STUDY

Graduates of the Agricultural Institute are awarded the Associate in Applied Science degree. The nine programs of study are: Agribusiness Management; Agricultural Equipment Technology; Agricultural Pest Control; Field Crops Technology; Flower and Nursery Crops Technology; Food Processing, Distribution and Service; General Agriculture; Livestock Management and Technology (animal husbandry option and dairy husbandry option); and Turfgrass Management.



SCHOOL OF DESIGN

Brooks Hall

C. E. McKinney, *Dean*

R. P. Burns, *Associate Dean and Coordinator of Advising*

C. E. Joyner, *Assistant Dean*

G. J. Hardie, *Director of Research*

W. M. Hodge, *Administrative Manager*

C. Carlton, *Librarian, Design Library*

T. E. Frye, *Learning Resources Specialist, Shop Laboratory*

W. K. Bayley, *Learning Resources Specialist, Media Center*

K. B. Pittman, *Learning Resources Specialist, Computer Center*

The School of Design, since its beginning in 1948, has addressed design in the broadest sense involving the disciplines of architecture, landscape architecture, product and visual design in a context of educational innovation. While the designer's traditional role is understood as that of giving meaningful form to the environment, the school gives attention to the larger responsibility of design in human, social, economic, political and behavioral terms. The school seeks to develop the designer's perception, knowledge base, skills and analytical problem solving abilities.

The expanding range of career opportunities in design, professional and otherwise, is equaled by the varied interests possessed by our students. Through a selective admissions process, the school's student population is highly motivated and heterogeneous. The faculty represents an equally broad spectrum of educational and professional expertise. The diversity of the faculty, both professionally and philosophically, provides unique opportunities for student development. These three factors in our educational matrix (career opportunities, student interests, and faculty expertise) are supported with a curriculum which affords each student the ability to shape, with faculty advice, a plan of study capable of facilitating his or her interests. While the school embraces the design disciplines of architecture, design, landscape architecture, product and visual design within a departmental structure, it functions as a unified educational center, interactive and dedicated to preparing designers who are capable of shaping the environment in whatever scale they choose but in response to the needs of society. The school offers a concentration in Textile/Design, a cooperative venture with the School of Textiles.

CURRICULA AND DEGREES

The School of Design offers undergraduate instruction leading to a Bachelor of Environmental Design degree in the disciplines of architecture, design, landscape architecture, product design and visual design.

The learning activities for our students are divided into three curriculum areas: (1) general courses including English, mathematics, humanities, social sciences, and natural sciences; (2) core courses which deal with bodies of knowledge and skills applicable to design and common to all disciplines, including communication and graphics, behavior, environment, history and philosophy, physical elements and systems, methods and management (these courses are largely taught within the school but include selected university courses as well); (3) studio courses providing the arena in which students apply their skills and knowledge to problems that are both real and theoretical. These synthetic activities are time intensive and are fundamental to design education.

After the common experience in first year, these studios relate to the student's declared disciplinary major. The flexibility of this curriculum plan affords the student the greatest opportunity to concentrate in a single discipline but facilitates his or her contact with other

design principles. The curriculum reflects the reality of the environmental marketplace—where in addition to their faculty mentors, our students relate to a broad range of design and development professionals through guest lectures, juries, projects and workshops.

Graduate studies are also offered in architecture, landscape architecture and product design. See the Graduate Catalog for information on the Master's programs.

DESIGN

Brooks Hall

Associate Professor C. E. Joyner, Head of the Department and Assistant Dean of the School of Design

Professors: M. Pause, E. W. Taylor; Professors Emeriti: G. L. Bireline, J. H. Cox, D. R. Stuart; Associate Professor: S. Toplikar; Assistant Professors: C. Cox, D. Raymond, S. Wilchins; Lecturer: J. Starrett.

The Department of Design provides a common first-year experience, Design Fundamentals, for students entering the School of Design and advanced design studies leading to the Bachelor of Environmental Design degree. Design Fundamentals focuses on exposure to basic design concepts and provides counseling, orientation and an historical structure for the fields of design in general and for future studies in the school and the university. The student develops through self-discovery, exploration and investigation of physical form.

Upon completing Design Fundamentals, students may select the Bachelor of Environmental Design program. Students in this program develop an interdisciplinary approach to their design education. The intent of this degree is to use design as a vehicle for a broad-based undergraduate education.

The Bachelor of Environmental Design degree encourages the continued use of self-discovery and basic design skills to develop the student's own process for analyzing, visualizing and externalizing ideas. Through a variety of studios and core courses, students solve various complex problems designed to build their professional attitudes and skills.

ARCHITECTURE

Brooks Hall

Professor Robert P. Burns, Head of the Department and Associate Dean of the School of Design.

Assistant Professor Linda Sanders, Assistant Head of the Department and Coordinator of Advising.

Professors: P. Batchelor, R. H. Clark, G. J. P. Reuer, H. Sanoff, V. Shogren; Professors Emeriti: H. H. Harris, H. L. Kamphoefner; Associate Professors: F. Harmon, W. Place, J. P. Rand, P. Tesar; Associate Professor Emeritus: D. W. Barnes; Assistant Professors: F. Rifki, J. O. Tector, E. Weinel.

In a world of changing social and cultural conditions, economics, technology, urbanization and aesthetic consciousness, the central task of the architect remains—to give meaningful form to the physical environment. However, these rapid changes force architects to look at their world differently than did earlier generations. Modern architects must concern themselves not only with aesthetics, but also with contemporary issues such as the preservation and adaptive use of older buildings and neighborhoods, energy conservation, and the health, safety and welfare of the public. The aesthetic revolution of the past few decades has freed architects from the rigidity of earlier theory, allowing greater diversity and expressiveness in architectural design.

The architecture curriculum balances professional background with a solid general education. University requirements in mathematics, English, natural science, social sciences and humanities are integrated with architectural design studios and a rich selection of design support courses. Central to the curriculum is the design studio—a working laboratory in which analysis and synthesis become real and meaningful activities to the architecture student.

To address the diversity of roles and responsibilities in architecture, the Department of Architecture offers several curricula in the architectural profession. The undergraduate Bachelor of Environmental Design in Architecture stresses the education of the individual and serves as the foundation for advanced study in the discipline. The first year is spent on design fundamentals in a curriculum common to all students in the School of Design. In the following years students receive a broad introduction to architectural theory, history, technology and design process while exploring many other educational opportunities within the university.

Following this pre-professional program students may apply to continue their studies in either of two professional programs—the one-year, post-graduate Bachelor of Architecture or the two-year Master of Architecture program (see the *NCSU Graduate Catalog* for information on the latter program). Entry into both advanced programs is competitive, and to be accepted students must demonstrate potential for professional accomplishment, capability in design, and satisfy a specific set of professionally-oriented undergraduate course requirements. Many students spend one or more years gaining professional experience in architecture firms or related fields before pursuing the advanced degrees.

Educational enrichment is an important characteristic of the architectural program. The School of Design regularly presents public lectures by leading professionals and exhibitions of design and art work. Free electives are available in related disciplines—painting, sculpture, photography, landscape architecture, product and visual design. Further design exposure is available through foreign study programs like the Vienna Exchange Program and field trips to buildings and urban centers of architectural interest.

OPPORTUNITIES

Graduates with the pre-professional Bachelor of Environmental Design in Architecture degree pursue careers in a variety of fields including private architectural practice, building construction, development, and public agencies. North Carolina and many other states are increasingly restricting professional licensing in architecture to holders of accredited advanced degrees such as the Bachelor of Architecture and the Master of Architecture. This educational requirement must be followed by three years of professional experience and completion of a comprehensive examination to qualify for professional certification as an architect.

ARCHITECTURE CURRICULUM

Degree: Bachelor of Environmental Design in Architecture

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
DF 101 Environmental Design I	6	DF 102 Environmental Design II	6
ENG 111 Composition and Rhetoric	3	ENG 112 Composition and Reading	3
PE 100 Health and Physical Fitness	1	Humanities/Social Science Elective ⁴	3
Humanities and Social Sciences Elective ⁴	3	Mathematics ¹	3-4
Mathematics ¹	3	Physical Education	1
	16		16/17

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
Studio ²	6	Studio ²	6
Core ⁵	3	Core	3
Humanities/Social Science Elective ⁴	3	Humanities/Social Science Elective ⁴	3
Natural Science Elective ³	4	Natural Science Elective ³	4
Physical Education	1	Physical Education	1
	17		17

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
Studio ²	6	Studio ²	6
Core ³	3	Core ³	3
Core ³	3	Core ³	3
Humanities/Social Science Elective ⁴	3	Humanities/Social Sciences elective ⁴	3
Free Elective	3		15
	18		

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
Studio ²	6	Studio ²	6
Core ³	3	Core ³	3
Core ³	3	Core ³	3
Free elective	3	Free elective	3
	15		15

Minimum Hours Required for Graduation ... 129⁶

¹Must include one calculus course and may include any of the courses on the departmental listing of courses acceptable towards this requirement.

²A minimum of six 400 series studios are required with a minimum of four of the six being ARC. No more than one studio may be taken in any semester.

³Selected from natural, physical, or biological sciences, but not to include math or computer science courses. For further clarification, see departmental listing of courses acceptable towards this requirement.

⁴The university requires 18 hours in social science humanities area. The courses are not limited to any specific department but are to show a distribution between the social sciences and humanities. For further clarification, see the departmental listing of courses acceptable towards this requirement.

⁵Each student is required to take a minimum of 30 credit hours which are to be selected from the six cores (Graphics and Communications, Behavior, Environment, History and Philosophy, Physical Elements and Systems, and Methods and Management). A student in this program must have an architecture faculty member as advisor.

⁶In order to receive two degrees from the School of Design, a student must complete 30 credit hours above the 129 hour requirement. These 30 hours are to include 18 credits in 400 level studios and 12 credits in core courses above those described above.

ARCHITECTURE CURRICULUM (Fifth Year)

Degree: Bachelor of Architecture

The *prerequisites* for entry into the fifth year are:

	<i>Credits</i>
University Requirements	42
Free Electives	9
Studios	48
DF 101, 102	12
ARC 400	24
ARC 400 or other 400 level studios	12
Core Courses	30
Must include the following courses:	
History of Design (DN 141 or 142 or ARC 244)	3
Structures (DN 251, 351, 352)	9
Architectural Materials (DN 254)	3
Environ. Control Systems (DN 253)	3
Design Methods & Prog. (DN 261)	3
Professional Practice (ARC 263)	1
Minimum Hours Required for Graduation	129

The fifth year *requirements* are:

Studios (ARC 501, 502)	12
Site Planning (DN 430)	3
Architectural Construction Systems (DN 457)	3
History (DN 441 or 447, or 448)	3
Professional Practice (ARC 561)	3
Elective from 400 or 500 level (ARC) courses in School of Design	6
Fifth Year Minimum Hours	30
Minimum Hours Required for Graduation	159

LANDSCAPE ARCHITECTURE

Professor A. L. Sullivan, Head of the Department

Professors: R. E. Stipe, R. R. Wilkinson; *Professor Emeritus:* E. G. Thurlow; *Associate Professors:* A. R. Abbate, R. C. Moore, D. Wood; *Assistant Professor:* D. Dalton; *Adjunct Assistant Professor:* B. L. Kays; *Associate Members of the Faculty:* T. O. Perry (Forestry), W. E. Hooker, J. C. Raulston M. E. Traer (Horticultural Science).

Landscape architecture is the profession concerned with location, design, and development of residential, commercial, institutional, recreational and other community land uses. Preservation and conservation of visual amenities, unique natural areas, and historic resources, are important components of landscape architecture. The student studies history of landscape architecture, planting design, materials and construction, site planning, graphic communication and community design. These subjects are applied to actual design problems in landscape architecture studios.

OPPORTUNITIES

There are approximately 30,000 practicing landscape architects in the U.S. and growth is projected as among the "Top Ten for the Eighties," by the U.S. Bureau of Labor Statistics. Landscape architects are employed by private firms and by agencies of government such as parks and recreation, forestry, and planning and environmental protection. Many pursue graduate degrees, qualifying them for careers in college teaching and more advanced assignments.

LANDSCAPE ARCHITECTURE CURRICULUM

Degree: Bachelor of Environmental Design in Landscape Architecture

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credit</i>
DF 101 Environmental Design I	6	DF 102 Environmental Design II	6
ENG 111 Composition & Rhetoric	3	ENG 112 Composition & Reading	3
PE 100 Health and Physical Fitness	1	Humanities/Soc. Sci. Elective ²	3
Humanities/Soc. Sci. Elective ²	3	Math Elective ¹	3
Mathematics Elective	4	Physical Education Elective	1
	<u>17</u>		<u>16</u>

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
Humanities/Soc. Sci. Elective ²	3	Landscape Concentration ⁴	3
Landscape Concentration ⁴	3	Landscape Concentration ⁴	3
Natural Science Elective ³	4	Natural Science Elective ³	4
Studio ⁵	6	Studio ⁵	6
Physical Education Elective	1	Physical Education Elective	1
	<u>17</u>		<u>17</u>

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
Advised Elective ⁶	3	Advised Elective ⁶	3
Humanities/Soc. Sci. Elective ²	3	Humanities/Soc. Sci. Elective ²	3
Landscape Concentration ⁴	3	Landscape Concentration ⁴	3
Landscape Concentration ⁴	3	Studio ⁵	6
Free Elective	3	Free Elective	3
	<u>15</u>		<u>18</u>

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
Advised Elective ⁶	3	Humanities/Soc. Sci. Elective ²	3
Advised Elective ⁶	3	Landscape Concentration ⁴	3
Landscape Concentration ⁴	3	Studio ⁶	6
Landscape Concentration ⁴	3	Free Elective	3
Free Elective	3		15
	15		

Minimum Hours Required for Graduation ...130⁷

¹ May include any of the courses on the departmental listing of courses acceptable towards this requirement.

² The university requires 18 hours in humanities/social science area. The courses are to show a distribution between the social sciences and humanities. For further clarification, see the departmental listing of courses acceptable towards this requirement.

³ Must include BS 100 or BO 200. The second science requirement may be met by taking 4 credit hours from the following courses: SSC 200 or SSC 205 or MEA 101 or MEA 110 or MEA 120.

⁴ *Landscape Concentrations*: 27 credit hours required which *must* include the following courses (15 credit hours): DN 257, DN 433, HS 211 or HS 212, DN 443 or DN 444, and DN 430. The remaining 12 credit hours may be chosen from: HS 211 or HS 212, HS 342, DN 222, DN 232, DN 431, SSC 200 or SSC 205, MEA 101, MEA 110 or MEA 120, MEA 208, MEA 400, DN 221/231, DN 423, DN 432, DN 495 (as approved by proper program director), HS 531 or any LAR 500 level course open to undergraduate students.

⁵ A minimum of four 400 level studios are required with a minimum of 3 of the 4 being LAR 400; however, one of the LAR 400 studios may be satisfied by HS 400. Studios may be taken any time during the final six semesters; however, no more than one studio may be taken in any semester.

⁶ Advised electives are to be selected in consultation with the student's advisor. Six hours of the required twelve must include courses from one of the programs within the School of Design. They may not include credit for military science (AS, MS), music (MUS) below 200 level, or physical education.

⁷ In order to receive two degrees from the School of Design, a student must complete 30 credit hours above the 130 requirement. These 30 hours are to include 18 credits in 400 level studio and 12 credits in landscape concentration from courses described above.

PRODUCT/VISUAL DESIGN

Brooks Hall

Professor V. M. Foote, Head of the Department

Professor: A. Lowrey; Associate Professors: A. V. Cooke, G. Prygrock, J. Wittkamp; Adjunct Associate Professor: A. Merino; Assistant Professors: S. Ater, K. Finkel, M. Lange, P. L. Middleton, S. Wilchins.

Upon completion of design fundamentals requirements, the student selecting the Product/Visual Design Department elects as a major area of concentration either product or visual design. **Product Design** is concerned with all the human aspects of machine-made products and their relationship to the environment. In some areas, this design discipline is referred to as industrial design. The designer is responsible for the product's human engineering, safety, shape, color, texture, maintenance and cost. Product design deals with consumer products as well as industrial products. In order to achieve these ends, designers must be involved in three major design and research activities: man's behavior; the man-product-machine relationship; the product itself.

Areas of investigation include furniture, housewares, appliances, transportation, machine tools, farm equipment, medical electronic instruments, recreational support equipment and others.

Graduates with a Bachelor of Environmental Design in Product Design have career opportunities in three general areas: corporate design offices in manufacturing companies, independent design offices, or governmental agencies.

Visual Design, often referred to as graphic design, is concerned with all aspects of visual communication. The increasing importance of communication in our society has created a demand for designers who have operational knowledge and creative abilities in various visual media. The elements of this field were historically found in various crafts, skills, commercial and production art. These have been integrated into a new design discipline; and the scope of educational development includes typography, photography, illustration, printing, production materials and methods. The applications include publication design (books, pamphlets and brochures), package design, signing and symbol design, advertising design (including newspapers, magazines, television and cinema), exhibit and display

design. To achieve a broader view of the environment, the discipline analyzes the visual character of our urban environment and its relation to social and behavioral functions, and explores visual solutions to socially defined problems. Through a broad range of visually creative experiences, the student develops an understanding of the elements and principles of organization common to all visual communication.

Graduates with a Bachelor of Environmental Design in Visual Design have career opportunities in professional design offices, corporate design offices, advertising agencies, corporations involved in printing, production, media development and communication.

Within the Product/Visual Design Department, there is an additional concentration—**Textile Design**. Courses in this concentration are offered by both the School of Design and the School of Textiles. The program provides a strong awareness of the constraints of the textile industry and the requirements of the retail trade through appropriate project work, seminars and associated field trips. As well as offering a good general education that incorporates aesthetics, technology and economics in the context of a particular industry, the concentration is particularly appropriate for people who wish to become practicing textile designers, either in an industrial setting or in private practice.

PRODUCT DESIGN CURRICULUM

Degree: Bachelor of Environmental Design in Product Design

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
DF 101 Environmental Design I	6	DF 102 Environmental Design II	6
ENG 111 Composition & Rhetoric	3	ENG 112 Composition & Reading	3
PE 100 Health and Physical Fitness	1	Humanities/Soc. Sci. Elective ⁴	3
Humanities/Soc. Sci. Elective ⁴	3	Math Elective ¹	4-3
Math Elective ¹	3	Physical Education	1
	<u>16</u>		<u>16-17</u>

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
DN 255 Contemp. Mfg. Processes I ⁵	3	DN 256 Contemp. Mfg. Processes II ⁵	3
DN 318 Ideation I ⁵	3	DN 418 Ideation II ⁵	3
Natural Science Elective ³	4	Natural Science Elective ³	4
Studio ²	6	Studio ²	6
Physical Education	1	Physical Education	1
	<u>17</u>		<u>17</u>

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
Core ⁵	3	Core ⁵	3
Core ⁵	3	Core ⁵	3
Core ⁵	3	Humanities/Soc. Sci. Elective ⁴	3
Humanities/Soc. Sci. Elective ⁴	3	Studio ²	6
Studio ²	6		<u>15</u>
	<u>18</u>		

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
Core ⁵	3	Humanities/Soc. Sci. Elective ⁴	3
Humanities/Soc. Sci. Elective ⁴	3	Studio ²	6
Studio ²	6	Free Elective	3
Free Elective	3	Free Elective	3
	<u>15</u>		<u>15</u>

Minimum Hours Required for Graduation ...129⁶

¹Must include one calculus course and may include any of the courses on the departmental listing of courses acceptable towards this requirement.

²A minimum of six 400 series studios are required with a minimum of four of the six being PD. No more than one studio may be taken in any semester.

²Selected from natural, physical, or biological sciences, but not to include math or computer science courses. For further clarification, see departmental listing of courses acceptable towards this requirement.

³The university requires 18 hours in humanities/social science area. At least 6 of the 18 hours must be in humanities and at least 6 of the 18 must be in social sciences. For further clarification, see the departmental listing of courses acceptable towards this requirement.

⁴Each student is required to take a minimum of 30 credit hours which are to be selected from the six cores (Graphic and Communications, Behavior, Environment, History and Philosophy, Physical Elements and Systems, and Methods and Management). *Note:* DN 255, 256, 318, and 418 are required as part of the 30 credit hours. A student in this program must have a product design faculty member as an advisor.

⁵In order to receive two degrees from the School of Design, a student must complete 30 credit hours above the 129 hour requirement. These 30 hours are to include 18 credits in 400 level studio and 12 credits in core courses above those described above.

TEXTILE DESIGN CONCENTRATION

Degree: Bachelor of Environmental Design in Product Design

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
DF 101 Environmental Design I.....	6	DF 102 Environmental Design II.....	6
ENG 111 Composition & Rhetoric.....	3	ENG 112 Composition & Reading.....	3
PE 100 Health and Physical Fitness.....	1	PD (TMT) 170 Textile Design Orient. ³	1
Humanities/Soc.Sci. Elective ²	3	Humanities/Soc. Sci. Elective ²	3
Math Elective ¹	3-4	Math Elective ¹	4-3
	16-17	Physical Education Elective.....	1
			18-17

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
DN 255 Contemp. MFG. Processes I ³	3	DN 256 Contemp. Mfg. Processes II ³	3
DN 318 Ideation I ³	3	DN 418 Ideation II ³	3
T 105 Intro. Text. Mat. Science ³	3	PD (TMT) 272 Plant Text. Design ³	3
Studio ⁴	6	Studio ⁴	6
Physical Education Elective.....	1	Physical Education Elective.....	1
	16		16

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
PD (TMT) 371 Woven Textile Design ³	3	PD (TMT) 372 Knitted Textile Design ³	3
Core ³	3	Humanities/Soc. Sci. Elective ²	3
Humanities/Soc. Sci. Elective ²	3	Studio ⁴	6
Studio ⁴	6	Free Elective.....	3
Free Elective.....	3		15
	18		

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
PD (TMT) 470 Text. Design Studio ³	6	Humanities/Soc. Sci. Elective ²	3
Core ³	3	Natural Science Elective ⁵	4
Humanities/Soc. Sci. Elective ²	3	Studio ⁴	6
Nat. Science Elective ⁵	4	Free Elective.....	3
	16		16

Minimum Hours for Graduation 131¹⁶

¹Must include one calculus course. May not include credit for Math 100, 111, 115, 115A, 116, 122, 127, 416, 433, 491, 493.

²The university requires 18 hours in humanities/social science area. At least 6 of the 18 hours must be in the humanities and at least 6 must be in the social sciences. A listing of courses which may count towards meeting this requirement is available from your advisor.

³Each student is required to take a minimum of 31 credit hours which must include: DN 255, 256; DN 318, 418; PD (TMT) 170; T 250; PD (TMT) 272, PD (TMT) 372, PD (TMT) 470. Remaining course is to be selected from one of six cores (Graphics and Communications, Behavior, Environment, History and Philosophy, Physical Elements and Systems, and Methods and Management).

⁴A minimum of six 400 series studios are required with a minimum of four of the six being PD. No more than one studio may be taken in any semester.

⁵Selected from natural, physical, or biological sciences, but not to include math or computer science courses. A listing of courses which may count towards meeting this requirement is available from your advisor.

⁶In order to receive two degrees from the School of Design, a student must complete 30 credit hours above the 131 hour requirement. These 30 hours are to include 18 credits in 400 level and 12 credits in core courses above those described above.

VISUAL DESIGN CURRICULUM

Degree: Bachelor of Environmental Design in Visual Design

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
DF 101 Environmental Design I	6	DF 102 Environmental Design II	6
ENG 111 Composition & Rhetoric	3	ENG 112 Composition & Reading	3
PE 100 Health and Physical Fitness	1	Humanities/Soc. Sci. Elective ⁴	3
Humanities/Soc. Sci. Elective ⁴	3	Math Elective ¹	4-3
Math Elective ¹	3	Physical Education Elective	1
	16		17-16

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
DN 217 Typography I ⁵	3	DN 317 Typography II ⁵	3
DN 455 Visual Design Mat'ls & Proc. I ⁵	3	DN 456 Visual Design Mat'ls & Proc. II ⁵	3
Natural Science Elective ³	4	Natural Science Elective ³	4
Studio ²	6	Studio ²	6
Physical Education Elective	1	Physical Education Elective	1
	17		17

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
Core ⁵	3	Core ⁵	3
Core ⁵	3	Core ⁵	3
Core ⁵	3	Humanities/Soc. Sci. Elective ⁴	3
Humanities/Soc. Sci. Elective ⁴	3	Studio ²	6
Studio ²	6		15
	18		

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
Core ⁵	3	Humanities/Soc. Sci. Elective ⁴	3
Humanities/Soc. Sci. Elective ⁴	3	Studio ²	6
Studio ²	6	Free Elective	3
Free Elective	3	Free Elective	3
	15		15

Minimum Hours Required for Graduation ...129⁶

¹Must include one calculus course and may include any of the courses on the departmental listing of courses acceptable towards this requirement.

²A minimum of six 400 series studios are required with a minimum of four of the six being VD. No more than one studio may be taken in any semester.

³Selected from natural, physical, or biological sciences, but not to include math or computer science courses. For further clarification, see departmental listing of courses acceptable towards this requirement.

⁴The university requires 18 hours in social science humanities area. The courses are not limited to any specific department but are to show a distribution between the social sciences and humanities. For further clarification, see the departmental listing of courses acceptable towards this requirement.

⁵Each student is required to take a minimum of 30 credit hours which must include DN 217, 317, 455, and 456. The remaining 18 credits are to be selected from the six cores (Graphics and Communications, Behavior, Environment, History and Philosophy, Physical Elements and Systems, and Methods and Management). A student in this program must have a visual design faculty member as an advisor.

⁶In order to receive two degrees from the School of Design, a student must complete 30 credit hours above the 129 hour requirement. These 30 hours are to include 18 credits in 400 level studio and 12 credits in core courses above those described above.

TEXTILE DESIGN CONCENTRATION

Degree: Bachelor of Environmental Design in Visual Design

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
DF 101 Environmental Design I	6	DF 102 Environmental Design II	6
ENG 111 Composition & Rhetoric	3	ENG 112 Composition and Reading	3
PE 100 Health and Physical Fitness	1	PD (TMT) 170 Textile Design Orient. ³	1
Humanities/Soc. Sci. Elective ²	3	Humanities/Soc. Sci. Elective ²	3
Math. Elective ¹	3	Math Elective ¹	4-3
	16	Physical Education Elective	1
			18-17

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
DN 217 Typography I ³	3	DN 317 Typography II ³	3
DN 455 Visual Design Mat'ls & Process. I ³	3	DN 456 Visual Design Mat'ls. Process. II ³	3
T 105 Intro. Text. Mat. Science ³	3	PD (TMT) 272 Printed Text. Design ³	3
Studio ⁴	6	Studio ⁴	6
Physical Education Elective	1	Physical Education Elective	1
	16		16

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
PD (TMT) 371 Woven Textile Design ³	3	PD (TMT) 372 Knitted Textile Design ³	3
Core ³	3	Humanities/Soc. Sci. Elective ²	3
Humanities/Soc. Sci. Elective ²	3	Studio ⁴	6
Studio ⁴	6	Free Elective	3
Free Elective	3		15
	18		

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
PD (TMT) 470 Textile Design Studio ³	6	Humanities/Soc. Sci. Elective ²	3
Core ³	3	Natural Science Elective ⁵	4
Humanities/Soc. Sci. Elective ²	3	Studio ⁴	6
Natural Science Elective ⁵	4	Free Elective	3
	16		16

Minimum Hours Required for Graduation ... 131⁶

¹Must include one calculus course. May not include credit for Math 100, 111, 115, 115A, 122, 127, 416, 433, 491, 493.

²The university requires 18 hours in humanities/social science area. At least 6 of the 18 hours must be in the humanities, and at least 6 must be in the social sciences. A listing of courses which may count towards meeting this requirement is available from your advisor.

³Each student is required to take a minimum of 31 credit hours which should include: DN 455, 456; DN 217, 317; PD (TMT) 170, T 250, PD (TMT) 272, PD (TMT) 371, PD (TMT) 372, PD (TMT) 470. Remaining course is to be selected from one of the six cores (Graphics and Communications, Behavior, Environment, History and Philosophy, Physical Elements and Systems, and Methods and Management).

⁴A minimum of six 400 series studios are required with a minimum of four of the six being VD. No more than one studio may be taken in any semester.

⁵Selected from natural, physical, or biological sciences, but not to include math or computer science courses. A listing of courses which may count towards meeting this requirement is available from your advisor.

⁶In order to receive two degrees from the School of Design, a student must complete 30 credit hours above the 131 hour requirement. These 30 hours are to include 18 credits in 400 level studio and 12 credits in core courses above those described above.

SCHOOL OF EDUCATION

Poe Hall

C. J. Dolce, *Dean*

H. A. Exum, *Associate Dean*

R. T. Williams, *Associate Dean*

A. P. Smith, *Minority Student Adviser*

The School of Education is concerned with the problems of human development from both psychological and educational perspectives. With emphases upon the preparation of middle grades, secondary, and post-secondary teachers, counselors, supervisors, administrators and psychologists, the school seeks students who are dedicated to the improvement of human beings through education and service and who are sensitive to the complexity of teaching/learning processes. The school is composed of the Departments of Adult and Community College Education, Counselor Education, Curriculum and Instruction, Educational Leadership and Program Evaluation, Mathematics and Science Education, Occupational Education and Psychology.

Undergraduate degree programs are offered in agricultural education, education general studies, health occupations education, industrial arts education, marketing education for teachers, mathematics education, science education, technical education, vocational industrial education, and psychology. In addition to being admitted to a curriculum, all teacher education candidates must meet program requirements for admission to candidacy in teacher education and for admission to student teaching. Graduates of the undergraduate programs in education receive a Bachelor of Science degree in education, and normally qualify for an "A" certificate to teach in their chosen fields. Graduates of the undergraduate program in psychology receive a Bachelor of Arts in Psychology degree.

Seven degree programs (agricultural education, health occupations education, industrial arts education, marketing education for teachers, mathematics education, science education, and vocational industrial education) named in the preceding paragraph lead to certification to teach in grades 9-12. In addition, the School of Education offers middle grades degree program and certification (grades 6-9) with concentrations in industrial arts, language arts, mathematics, science, and social studies. Students seeking this certification will graduate with one or two fields of concentration. A concentration is an in-depth study in a discipline containing fewer courses than is normally required for a major, but leading to teacher certification in that discipline.

Professional education courses are provided for those students enrolled in the School of Humanities and Social Sciences who wish to become teachers of secondary school English, social studies, French, and Spanish, with certification for grades 9-12. In the School of Humanities and Social Sciences section of this Catalog, see the sections describing the teacher education options. Students enrolled in the School of Agriculture and Life Sciences or in science and mathematics departments may double-major in the School of Education, and also obtain a North Carolina secondary teacher's certificate.

Most of these teacher education programs are in fields of teacher shortage. Graduates have little difficulty finding teaching positions.

Most of the education and psychology disciplines listed in the following pages also offer graduate-level curricula. In addition, the School of Education has graduate programs in:

Adult and Community College Education

Counselor Education

Curriculum and Instruction

Education Administration

Middle Grades Education

Occupational Education

Reading Education

Special Education

See the Graduate Catalog or contact faculty members for information on master's and doctoral programs.

Public school sixth-year (intermediate) certification programs are available in agricultural, occupational, and vocational industrial education; curriculum and instruction and supervision; administration; counseling; reading education; special education; mathematics and science education; and school psychology. All of the bachelor's level and graduate level certification programs are approved by the North Carolina State Board of Education. All of the teacher education programs are accredited by the National Council for the Accreditation of Teacher Education (NCATE).

The modern School of Education building is named Poe Hall. It includes a Curriculum Materials Center, an Instructional Materials Production Center, and an Instructional Computing Facility. The building houses laboratories for industrial arts, reading, science, psychology, and guidance and testing activities, as well as a children's play area with an observation room.

SCHOLARSHIPS

The School of Education has a scholarship and awards program for undergraduate students. Seventeen awards were made for the 1986-87 academic year, including several scholarships reserved for minority students. Several students also received awards through the Scholarship Loan Fund for Prospective Teachers. North Carolina State University is one of nine institutions selected to participate in the new N.C. Teaching Fellows program.

SCHOLARS AND HONORS PROGRAMS

The School of Education participates in the campus Scholars Program, in which approximately 30 selected students each year participate in bi-weekly activities that broaden and deepen their university experiences. The Psychology and Occupational Education Departments offer an optional curriculum for honors students. There is an honors society in psychology.

INTERNATIONAL ACTIVITIES

Several faculty members are involved in overseas projects, in Arabia, Japan, Peru, Puerto Rico, and Sri Lanka. A project in Saudi Arabia involved three students for a three-month summer assignment. Some of the foreign language teacher education students spent a year in France or Spain in an exchange program. One student recently performed his student teaching in Kenya. The enrollment of international students in the several education and psychology programs, and elsewhere at N. C. State, also offers cross-cultural opportunities without one's leaving the campus.

AGRICULTURAL EDUCATION

Poe Hall (Room 602)

Associate Professor L. R. Jewell, Coordinator of Advising

Professor: J. K. Coster; Professors Emeriti: J. B. Kirkland, C. C. Scarborough; Associate Professors Emeriti: C. D. Bryant, T. R. Miller; Assistant Professors: J. L. Flowers, B. J. Malpiedi.

Agricultural education, in its broadest sense, encompasses areas of study which will enable one to participate effectively in planning, promoting and initiating programs of education in agriculture. A program is offered which leads to a Bachelor of Science degree. Programs are designed for the teachers of vocational agriculture in the secondary schools, technical institutes and community colleges. The demand for agricultural education teachers exceeds present supply. Graduates who obtain certification in the bachelor's program generally have a choice of positions in the Carolinas, Virginia, and throughout the nation.

AGRICULTURAL EDUCATION CURRICULUM

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 102 Obj. in Agri. Ed.	1	BS 100 Gen. Biology	4
ENG 111 Composition & Rhetoric	3	ENG 112 Composition & Reading	3
MA 111 Algebra & Trigonometry	4	Math Elective**	3
PE 100 Health and Physical Fitness	1	PO or ANS Elective	4
Agri. Electives	3-4	Physical Education Elective	1
History Elective	3		15
	15-16		

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 Gen. Chem. I	4	BAE 211 Farm Machinery	3
EB 212 Econ. of Agri. <i>or</i>		CH 103 General Chem. II	4
EB 201 Economics I	3	ED 313 Cont. Vocational Agri.	3
Agri. Elective	3-4	SOC 241 Rural Soc. USA <i>or</i>	
Plant Sci. Elective*	3-4	SOC 202 Prin. of Sociology	3
Free Elective	3	"B" Elective in Agri.	3
Physical Education Elective	1	Physical Education Elective	1
	17-19		17

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
BAE 201 Shop Practices	2	ED 490 Sr. Seminar, AED	1
ED 344 School & Society	3	PSY 476 Psy. of Adolescent Dev. <i>or</i>	
PSY 304 Educational Psy.	3	PSY 376 Human Growth & Development	3
Agri. Specialty***	3-4	SSC 200 Soil Science	4
"A" or "B" Elective in Agriculture****	3-4	Agri. Specialty***	3-4
Free Elective	3	Literature Elective	3
	17-19	Speech Elective	3
			17-18

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 411H Student Teaching Agriculture	8	Agri. Specialty***	3
ED 412H Teaching Adults	2	Humanities Electives*****	6
ED 413H Planning Ed. Programs	2	Political Science Elective	3
ED 451 Improving Read. in Second. Schools	2	Free Elective	3
SOC 416A Research Methods	3		15
	17		

Minimum Hours Required for Graduation 130

*Includes courses in crop science, horticultural science or forestry.

**Select from MA courses above MA 111 level or computer science.

***These three courses, when related to other ALS courses, should total a minimum of 12 semester hours for a specialty in ALS.

****Select from "A" or "B" electives in agriculture and related to specialty. (Consult listing of "A" and "B" courses in School of Agriculture and Life Sciences.)

*****Humanities electives should be selected from the fine arts, philosophy, history, literature, languages and/or religion.

EDUCATION, GENERAL STUDIES

Poe Hall (Room 608)

Associate Professor R. C. Serow, Coordinator of Advising

The Education, General Studies program has three areas of emphasis which serve the needs of the following groups of students: 1) those students who wish to seek a teaching certificate in fields not offered at North Carolina State University but at another institution; 2) those students who wish to work in fields which do not require certification; e.g., employee in juvenile home, residential school, state or local education-related agencies, or a paraprofessional in schools; and 3) those students enrolled in a teacher education program

at North Carolina State University whose career goals in education have changed. Students enrolled in a teacher education program, upon the recommendation of their department and approval of the School of Education's Associate Dean for Undergraduate Programs, may transfer to this program.

REQUIREMENTS

GENERAL STUDIES

	<i>Credits</i>
<i>Communication Skills</i>	9
English composition (ENG 111, 112)	
Speech (one course)	
<i>Humanities</i>	18
History (HI 243 and 244 or HI 205 and 233)	
Fine Arts (at least one course)	
Literature (English or American; at least one course)	
Philosophy (PHI 205)	
<i>Social Sciences</i>	12
Political Science or Economics (two-course sequence)	
Psychology (PSY 200)	
Sociology (SOC 202)	
<i>Natural Sciences</i>	7-8
Includes at least one laboratory course	
<i>Mathematics</i>	6-7
One mathematics course and an elective from mathematics, statistics, or computer science; but excluding MA 115	
<i>Physical Education</i>	4
PE 100 Health & Physical Fitness	
Three one-credit courses	
<i>Electives</i>	10-13
	66-71

MAJOR

	<i>Credits</i>
<i>Core Courses:</i>	
Introductory Course	3-4
ED 101 and 305,* 102 and 313,* 203, 205, or 242	
ED 201 Alternative Education Agencies	3
ED 344 School and Society	3
ED 496 Special Topics in Education	3
PSY 304 Educational Psychology	3
PSY 376, 475, or 476	3
	18-19

Emphasis 1 (Certification in teaching area not at N.C. State University)

ED 483 Introduction to Media and Instructional Technology	3
PSY 310 or 320	3
SP 213 Oral Interpretation of Literature	3
Courses per agreement to be taken at a cooperating institution	18
Restricted Electives (An approved sequence in ED or PSY)	12
	39

Emphasis 2 (Noncertified position in education or related occupations)

ED 483 Introduction to Media and Instructional Technology	3
PHI 304 Philosophy of Education	3
PSY 310 or 320	3
SOC 305 and 311	6
SOC 418 Sociology of Education	3
SP 112 Interpersonal Communication	3
Restricted Electives (An approved sequence in ED or PSY)	18
	39

Emphasis 3 (Transfer from teacher certification to general studies program without certification)

Teaching field	30
Supporting courses	9
	39

Minimum Hours Required for Graduation	125
---	-----

*These courses must be taken in sequence, with a total of 4 credits.

ENGLISH TEACHER EDUCATION

Assistant Professor Ruie J. Pritchard, Coordinator of Advising

Students desiring to become secondary English teachers in grades 9-12 will be enrolled in the School of Humanities and Social Sciences. In that school's section of this Catalog, curriculum requirements for the teacher education option can be found under English. Students desiring to become language arts teachers in grades 6-9 will be enrolled in the School of Education. For details, consult the Language Arts Education description.

FRENCH TEACHER EDUCATION

Associate Professor A. Malinowski, Coordinator of Advising

Students desiring to become teachers of French will be enrolled in the School of Humanities and Social Sciences. In that school's section of this Catalog, curriculum requirements for the teacher education option in French can be found under Foreign Languages and Literatures.

HEALTH OCCUPATIONS TEACHER EDUCATION

Poe Hall (Room 502)

Assistant Professor J. A. Davis, Coordinator of Advising

Assistant Professor R. M. Patterson

The Health Occupations Education curriculum is designed to prepare qualified teachers for health occupations programs in hospitals, community colleges, technical institutes, and secondary schools. The curriculum is for students who have already developed competency in a health occupation specialty. Credit is granted by validation of a current credential (license, certification, registration) in a health occupations specialty of at least two years in length of training and approved by the American Dental Association (ADA), American Medical Association (AMA) or Council on Professional Accreditation (COPA). Thirty semester hours of credit is granted toward the major for a current credential in a health occupation. The core courses are in education and health-related areas, with major emphasis on developing competence in the teacher role.

HEALTH OCCUPATIONS EDUCATION CURRICULUM

FRESHMAN YEAR			
<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
BS 100 General Biology	4	ENG 112 Composition & Reading	3
ENG 111 Composition & Rhetoric	3	ZO 212 Anatomy and Physiology	4
Humanities/Social Science Elective***	3	Humanities/Social Science Elective***	3
Mathematics Elective*	3	MA, CSC, or ST Elective	3
	13		13
SOPHOMORE YEAR			
<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
PSY 304 Educational Psychology	3	ED 352 Survey of Health Occupations	3
SP 112 Interpersonal Communication	3	Humanities/Social Science Electives***	6
Humanities/Social Science Elective***	6	Free Elective	3
	12		12

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 344 School and Society	3	ED 340 Survey of Vocational Education	3
ED 353 Strategies of Teach. a Health Occup.	3	ED 354 Eval. Skills Teaching Health Occup.	3
ED 483 Intro. to Media & Instruct. Tech.	3	ED 358 Problems in Health Education	3
Free Electives	6	ED 451 Improving Reading Sec. Schools	2
	15	PSY 476 Psychology of Adolescent Dev.	3
			14

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 433 Health Occup. Specialty Pract.	6	License in a Health Occupation	30**
ED 434 Health Occup. Teaching Pract.	8	Minimum Hours Required for Graduation	123
	14		

*Credit is not granted for MA 115.

**Credit granted by validation of current credential (license, certification, registration) in a health occupations specialty of at least two years in length of training and approved by the American Dental Association (ADA), American Medical Association (AMA) or Council on Professional Accreditation (COPA).

***Must include at least one literature course and at least one history course.

INDUSTRIAL ARTS EDUCATION

Poe Hall (Room 300)

Associate Professor R. E. Peterson, Coordinator of Advising

Professor Emeritus: D. W. Olson; Associate Professor: R. E. Wenig; Associate Professors Emeriti: W. L. Cox, Jr., T. B. Young; Assistant Professors: W. W. DeLuca, W. J. Haynie, III, R. T. Troxler.

Industrial arts concerns itself with materials, processes and products of industry, including the graphical presentation of these. It is concerned with a study of changes made in materials to make them more useful and with problems related to these changes. The Industrial Arts Education curriculum prepares teachers and supervisors of industrial arts for secondary schools.

INDUSTRIAL ARTS EDUCATION CURRICULUM

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ENG 111 Composition & Rhetoric	3	ENG 112 Composition & Reading	3
GC 101 Engineering Graphics I	2	IA 122 Metal Technology I	3
IA 111 Intro. to Industrial Arts	1	SOC 202 Prin. of Sociology	3
IA 115 Wood Processing I	3	Humanities/Soc. Sci. Elective	3
MA 111 Algebra and Trigonometry	4	Mathematics Elective	3
PE 100 Health and Physical Fitness	1	Physical Education Elective	1
	14		16

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 111 Foundations of Chemistry	4	ED 242 Intro. to Teaching Ind. Arts	3
IA 231 Industrial Arts Design	3	IA 246 Graphics Technology	3
IA 233 Metal Technology II	3	PSY 304 Educational Psychology	3
Economics Elective	3	PY 221 College Physics	5
Literature Elective	3	Physical Education Elective	1
Physical Education Elective	1	Free Elective	3
	17		18

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 344 School and Society	3	ED 362 Curr. & Methods in Ind. Arts	4
IA 351 General Ceramics	3	IA 360 Electrical Technology II	3
IA 359 Electrical Technology I	3	IA 364 Wood Processing II	3
PSY 376 Human Growth & Development	3	IA 368 Technical Drawing II	3
Free Elective	6	Speech Elective	3
	18		16

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 473 Student Teaching in Ind. Arts	8	ED 451 Improving Reading in Sec. Schools	2
ED 479 Industrial Arts Lab. Planning	3	IA 476 Power Technology	3
ED 492 Senior Seminar in Ind. Arts Ed.	3	IA 480 Modern Industries	3
	14	Humanities/Soc. Sci. Elective	6
		Political Science or History Elective	3
			17

Minimum Hours Required for Graduation 130

INDUSTRIAL AND TECHNICAL EDUCATION

Poe Hall (Room 502)

Associate Professor J. R. Clary, Acting Coordinator of Advising

Professor Emeriti: D. M. Hanson, J. T. Nerden; Associate Professor Emeritus: F. S. Smith; Associate Professor: E. I. Farmer; Assistant Professor Emeritus: T. C. Shore.

The Industrial and Technical Education program offers curricula to prepare teachers, supervisors and administrators in trade and/or technical areas for the public schools, area vocational schools, community colleges and technical institutes. Completion of four-year curricula in vocational industrial education and technical education leads to the Bachelor of Science in education. The curricula are planned to provide students with broad cultural and professional backgrounds to parallel occupational experience. The program offers graduate degrees. For further information consult the Graduate Catalog.

VOCATIONAL INDUSTRIAL EDUCATION CURRICULUM

The curriculum in vocational industrial education is designed to prepare vocational teachers for secondary schools, area vocational schools and post-secondary school vocational programs. Graduates have a wide selection of employment opportunities. The rapid growth of vocational programs in the secondary schools has created an urgent demand for vocational teachers. A student may qualify for teaching positions in introduction to industrial education, trade preparatory training, and industrial cooperative training in these fast-growing programs in the secondary schools.

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 100 Introduction to Industrial Education	2	ENG 112 Composition and Reading	3
ENG 111 Composition and Rhetoric	3	GC 101 Engineering Graphics I	2
CH 111 Foundations of Chemistry <i>or</i>		History Elective	3
Chemistry Elective	4	Mathematics or Computer Science Elective	3
MA 111 Algebra & Trigonometry	4	Technical Elective	3
PE 100 Health and Physical Fitness	1	Physical Education Elective	1
	14		15

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 327 Hist. & Phil. Indust. Tech. Ed.	3	EB 201 Economics I	3
PS 201 The American Governmental System	3	ED 305 Trade Anly. in Course Devel.	3
Physics Elective	3	PE 280 Emergency Medical Care and First Aid ..	2
Speech Elective	3	SOC 202 Principles of Sociology	3
Technical Elective	3	Natural Science Elective	3
Physical Education Elective	1	Physical Education Elective	1
	<u>16</u>	Free Elective	3
			<u>18</u>

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 344 School & Society	3	ED 422 Methods Teach Voc. Ind./Tech. Ed.	3
ED 421 Princ. & Pract. Ind. Coop. Training	3	ED 428 Org. Related Study Mat'ls in Voc. Ed.	3
ED 483 Intro. to Media & Instruct. Tech.	3	ED 457 Org. & Mgmt. Youth Club Act.	3
PSY 304 Educational Psychology	3	PY 376 Human Growth & Development or	
English Elective	3	PSY 476 Psych. of Adolescent Dev.	3
Free Elective	3	Technical Elective	3
	<u>18</u>	Free Elective	3
			<u>18</u>

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 444 Student Teach Voc. Ind./Tech. Ed.	8	Economics Elective	3
ED 451 Improving Reading in Sec. Schools	2	Humanities Elective	3
ED 491 Senior Seminar in Ind./Tech. Ed.	3	Sociology Elective	3
	<u>13</u>	Technical Elective	3
		Free Elective	3
			<u>15</u>

Minimum Hours Required for Graduation 127

Technical electives are designed to provide breadth of study in several technical areas. Technical electives must be selected to represent at least three of the discipline groupings below and chosen from the course options listed.

Biological and Agricultural Engineering: BAE 201

Civil Engineering: CE 201

Computer Science*: CSC 101, CSC 102

Design: DN 255

Economics and Business: EB 313, EB 325, EB 326, EB 332

Engineering (General): Select from available courses.

Horticultural Science: HS 201, HS 342

Industrial Arts Education: IA 115, IA 122, IA 233, IA 246, IA 359, IA 360, IA 480

Industrial Engineering: IE 241, IE 345, IE 355

Textiles: T 101

Wood and Paper Science: WPS 201

*May be used as either Technical Elective or Math Elective.

TECHNICAL EDUCATION CURRICULUM

The curriculum in technical education prepares instructors within a wide range of teaching technologies and is closely coordinated with existing engineering curricula. A student enrolling in the technical education curriculum may specialize in areas related to his/her interest and/or previous work experience. Admission to the technical education curriculum is limited to students demonstrating proficiency in a given applied technology, i.e., electrical, electronics, mechanical, etc.* Employment opportunities for technical education graduates include teaching in community colleges, technical institutes, area vocational schools and within industry as instructors and coordinators of training programs.

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry I	4	EB 201 Economics I	3
ED 100 Intro. to Industrial Education	2	ENG 112 Composition and Reading	3
ENG 111 Composition and Rhetoric	3	MA 102 Analytic Geometry & Calc. I	4
MA 111 Algebra and Trigonometry	4	PS 201 American Governmental Syst.	3
PE 100 Health and Physical Fitness	1	Physical Education Elective	1
	14		14

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
GC 101 Engineering Graphics I	2	PSY 200 Introduction to Psychology	3
MA 201 Analytic Geometry & Calc. II	4	PY 208 General Physics or	
PY 205 General Physics or		PY 212 General Physics	4
PY 211 General Physics	4	Approved Electives**	6
Approved Elective**	3	Humanities Elective	3
Speech Elective	3	Physical Education Elective	1
Physical Education Elective	1		17
	17		

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 327 Hist. & Philo. of Ind. & Tech. Ed.	3	ED 305 Trade Anly. in Course Devel.	3
PSY 304 Educational Psychology	3	SOC 205 Work: Occupations and Prof.	3
SOC 202 Principles of Sociology	3	Approved Electives**	6
Approved Elective**	3	Free Elective	3
Humanities Elective	3		15
	15		

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 405 Ind. & Tech. Ed. Shop & Lab. Plan.	3	ED 444 Student Teach Voc. Ind./Tech. Ed.	8
ED 422 Methods of Teach Voc. Ind./Tech. Ed.	3	Electives	9
Approved Electives**	9		17
	15		

Minimum Hours Required for Graduation 124

*Students will be expected to demonstrate proficiency in the applied technology of their choice.

**Minimum of 27 hours of elective courses must be selected from engineering, engineering sciences, physical sciences, etc., in accordance with the student's area of specialization and with the approval of the adviser.

MARKETING EDUCATION FOR TEACHERS

Associate Professor L. S. Dillon, Coordinator of Advising

The Marketing Education program is designed to prepare marketing education teachers for work at the secondary school level. A strong business preparation also serves to qualify graduates for employment in marketing positions or in roles within distribution systems. The curriculum includes the pedagogy prerequisite to successful teaching and provides extensive knowledge of economics, marketing, management practice, advertising and selling.

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CSC 200 Intro. to Computers	3	ENG 112 Composition & Reading	3
ENG 111 Composition & Rhetoric	3	SOC 202 Principles of Sociology	3
MA 111 Algebra & Trigonometry	4	Humanities Elective	3
PE 100 Health & Physical Fitness	1	Mathematics Elective	3
History Elective	3	Natural Science Elective	4
Political Science Elective	3	Physical Education Elective	1
	17		17

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
EB 201 Economics I	3	EB 202 Economics II	3
ED 204 Intro. to Teaching Mktg. Ed.	3	EB 313 Marketing Methods	3
PHI 304 Philosophy of Education	3	Literature Elective	3
Speech Elective	3	Natural Science Elective	4
Free Elective	3	Free Elective	3
Physical Education Elective	1	Physical Education Elective	1
	<u>16</u>		<u>17</u>

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
BUS 466 Sales Management*	3	BUS 468 Mktg. Mgmt. & Planning*	3
EB 307 Business Law I	3	ED 340 Survey of Vocational Ed.	3
ED 341 Field Work in Occup. Education	1-3	ED 341 Field Work in Occup. Ed.	1-3
ED 344 School and Society	3	ED 511 Improving Reading in Sec. School	2
ED 357 Admin. & Supvn. Student Organ.	3	ED 483 Intro. to Media & Instruct. Tech.	3
PSY 304 Educational Psychology	3	PSY 476 or 376 Human Development	3
	<u>16-18</u>		<u>15-17</u>

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
BUS 948 Advertising Strategy*	3	ED 426 Admin. & Supvn. MKE Programs	3
EB 326 Personnel Management	3	ED 438 Student Teaching	8
ED 325 Curr. Meth. Teach. Mktg. Ed.	3	ED 493 Senior Seminar Marketing Ed.	3
ED 421 Prin. & Product. of Coop. Vocational Education	3		<u>14</u>
Free Elective	3	Minimum Hours Required for Graduation	127
	<u>15</u>		

*Taken at Meredith College.

MATHEMATICS AND SCIENCE EDUCATION

Poe Hall (Room 326)

Professor Ann C. Howe, Head of the Department

Professors: N. D. Anderson, L. M. Clark, J. R. Kolb; Professor Emeritus: H. E. Speece; Associate Professors: W. M. Waters, Jr., L. W. Watson, J. H. Wheatley; Associate Professor Emeritus: H. A. Shannon; Assistant Professor: L. V. Stiff; Adjunct Assistant Professors: R. R. Jones, C. M. Meek.

The Department of Mathematics and Science Education prepares undergraduate students to become teachers of mathematics and science. The department traditionally prepares competent professionals who have strong subject matter backgrounds and pedagogical skills. Departmental majors may seek certification for teaching secondary grades 9-12 or middle grades 6-9. Students interested in teaching in the middle grades may select from mathematics or science as single concentrations, or a mathematics/science dual concentration earning double certification. Students in the 9-12 secondary curriculum in mathematics or science education may complete a double major and receive a second degree in mathematics or one of the sciences. All of the programs provide a broad background in the natural sciences, social sciences and humanities; depth in mathematics or an area of science; and the development of professional competencies.

SCHOLARSHIPS AND AWARDS

One merit award is available for an entering freshmen in mathematics education. The Speece Scholarship is awarded annually to an outstanding junior or senior in either mathematics education or science education. The department sponsors a Mathematics and Science Education Club and recognizes the Outstanding Graduate in Mathematics Education and Science Education annually.

MATHEMATICS EDUCATION CURRICULUM

(Grades 9-12 Certification)

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 101 Orientation	0	CSC 101 Intro. to Programming	3
ENG 111 Composition & Rhetoric	3	ENG 112 Composition & Reading	3
MA 102 Analytic Geometry & Calc. I	4	MA 201 Analytic Geometry & Calc. II	4
PE 100 Health and Physical Fitness	1	History Elective ²	3
PHI 201 Logic	3	Social Science Elective ²	3
ST 101 Statistics by Example	3	Physical Education Elective	1
	14		17

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
MA 202 Analytic Geometry & Calc. III	4	ED 203 Intro. to Teaching Ma./Sci.	3
Literature Elective ²	3	ED 203L Intro. to Teaching Ma./Sci. Lab.	0
Required Specialization Course ⁵	3	Humanities Elective ²	3
Science Elective ¹	4	Required Specialization Course ⁵	3
Social Science Elective ²	3	Science ¹	4
Physical Education Elective	1	Speech Elective ²	3
	18	Physical Education Elective	1
			17

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 451 Improv. Reading in Second. Schools	2	ED 101J Orientation to Math/Sci.	0
PSY 304 Educational Psychology	3	ED 344 School & Society	3
Required Specialization Courses ⁵	6	MA 408 Found. of Euclidean Geometry	3
Science Elective ¹	3-4	MA 480 Teach. Math. & Microcomputers	3
Free Elective	3	Required Specialization Course ⁵	3
	17-18	Social Science Elective ²	3
		Free Elective	3
			18

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 470 Methods of Teach. Math ³	3	MA 405 Intro. to Linear Algebra & Matrices	3
ED 471 Student Teach. in Math ⁴	8	PSY 476 Psych. of Adolescent Development	3
ED 472 Dev. & Sel. Tea. Mat. Ma. ³	3	Humanities Elective ²	3
	14	Free Electives	6
			15

Minimum Hours Required for Graduation 130

¹Eight semester hours of *science* must be a two-course sequence in chemistry or physics. The remaining hours may be chosen from courses in the biological sciences, the physical sciences, and the marine, earth and atmospheric sciences.

²The humanities/social science electives must be chosen from the university's official list of courses. Many courses in philosophy, religion, literature, fine arts, history and foreign language are approved humanities courses. Social science electives come from courses in economics, sociology, anthropology, political science, psychology, and geography. Specified courses in speech, education, psychology and university studies are approved as either humanities or social sciences. It is highly recommended that students choose electives so that each of these areas is represented: economics, governmental systems, social systems and fine arts.

³These courses are taken together as a block during the fall semester and completed prior to student teaching.

⁴Student teaching is full-time for ten weeks of the fall semester.

⁵Students are required to take 15 hours in one of the three specializations listed below: (The semester in which the courses are usually taken is noted beside them.)

Mathematics Specialization

MA 225	3	MA 403	3	MA 433	3
Math Elective	3	Math Elective	3		

Computer Science Specialization

CSC 102	3	CSC 322 or		CSC 311	3
CSC 201	3	MA 225 or		CSC Elective	3
		MA 403	3		

Statistics Specialization

ST 301	3	MA 225 or	ST 421	5
ST 302	4	MA 403	ST 422	6

SCIENCE EDUCATION CURRICULUM (Grades 9-12 Certification)

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 101 Orientation	0	CH 103 Gen. Chemistry II or	
ENG 111 Composition & Rhetoric	3	CH 107 Prin. Chem.	4
CH 101 Gen. Chemistry I	4	ENG 112 Composition & Reading	3
MA 102 Analytic Geom. & Calc. I ¹ or		MA 201 Analytic Geom. & Calc. II ¹ or	
MA 112 Analytic Geom. & Calc. A	4	MA 212 Analytic Geom. & Calc. II B	4-3
PE 100 Health and Physical Fitness	1	Biological Sci. Elective	4
Humanities/Soc. Science Elective	3	Physical Education Elective	1
	15		15-16

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
PY 211 General Physics ³	4	ED 203 Intro. Teaching Math./Sci.	3
Humanities/Soc. Sci. Elective ²	3	ED 203L Intro. Teach. Math./Sci. Lab	0
Required science ⁵	3	PY 212 General Physics ³	4
Speech elective	3	Humanities/Soc. Sci. Elective ²	3
Free Elective	3	Required science ⁵	6
Physical Education Elective	1	Physical Education Elective	1
	17		17

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
HI 321 Ancient & Medieval Science or		ED 344 School and Society	3
HI 322 Rise of Modern Science or		ED 451 Improv. Reading in Second. Schools	2
PHI 340 Philosophy of Science	3	PSY 476 Psych. Adol. Development	3
PSY 304 Educational Psychology	3	Humanities/Soc. Sci. Elective ²	3
Humanities/Soc. Sci. Elective ²	3	Required science ⁵	6
Required science ⁵	7		17
	16		

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 475 Methods of Teach. Sci. ⁴	3	Humanities/Social Sci. Electives ²	6
ED 476 Student Teaching in Sci. ⁴	8	Required science ⁵	5
ED 477 Instructional Materials In Science ⁴	2	Electives	6
ED 495 Sr. Sem. in Math./Sci. Ed. ⁴	2		17
	15		

Minimum Hours Required for Graduation 129

¹Required of those specializing in chemistry or physics.

²To be selected as follows from the humanities and social sciences:

	<i>Credits</i>
One course in history	3
One course in literature	3
Two additional courses from any of the following humanities:	
fine arts, foreign language, history, literature, philosophy, religion	6
Three courses from any of the following social sciences:	
anthropology, economics, geography, political science, sociology, psychology	9

³Students may elect to take PY 205 and PY 208 or PY 201, 202, and 203 in lieu of PY 211-212.

⁴These courses are taken as a block in the professional semester (offered only during the fall semester for science education students).

⁵Students are required to take a minimum of 27 semester hours in one of the following four areas of specialization:

<i>Biology:</i>	
BO 200	4
BO (ZO) 360	4
BO 421 <i>or</i>	
ZO 421 <i>or</i>	
ZO (BO) 414	3-4
CH 220	4
GN 301 <i>or</i>	
GN 411, 412	3-4
MB 401	4
ZO 201	4

<i>Chemistry:</i>	
MA 202	4
Analytical Chemistry	4
Chemistry Electives	8
Earth Science Elective	3
Organic Chemistry	4
Physical Chemistry	4

<i>Earth Science:</i>	
MEA 101-110	4
MEA 200	3
MEA 201 <i>or</i>	
MEA 311	3
MEA 202-210	4
PY 223	3
Earth Science Electives	10

<i>Physics:</i>	
MA 202	4
PY 223	3
PY 203 <i>or</i>	
PY 407	3-4
Earth Science Elective	3
Physics-Math. Electives	13-14

MIDDLE GRADES EDUCATION

Associate Professor J. F. Arnold, Coordinator

The Middle Grades Education program seeks to prepare teachers who can effectively instruct young adolescents and be responsive to their unique needs, interests and abilities. Graduates may seek certification for teaching in grades 6-9 in two subject disciplines: either language arts and social studies *or* mathematics and science. Students concentrating in humanities teaching are advised by the Department of Curriculum and Instruction; those concentrating in mathematics/science are advised by the Department of Mathematics and Science Education. Students who wish to become certified in only mathematics or science teaching in the middle grades level may enroll in a special track in a mathematics education or science education degree program.

LANGUAGE ARTS AND SOCIAL STUDIES EDUCATION— DUAL CONCENTRATION (6-9 Certification)

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ENG 111 Composition & Rhetoric	3	ENG 112 Composition & Reading	3
HI 205 Western Civilization since 1400 <i>or</i>		HI 243 <i>or</i> 244 U.S. History	3
HI 233 World in 20th Century	3	Anthropology Elective ²	3
PE 100 Health & Physical Fitness	1	MA/CSC/ST Elective	3
Math Elective ¹	3	Natural Science Elective	4
Natural Science Elective	4	Physical Education Elective	1
	14		17

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ENG 265 American Literature I	3	ED 200 Principles of Teaching Geography	3
HI 364 North Carolina History*	3	ED 205 Intro. Teaching Humanities/Soc. Sci.	3
SP 213 Oral Interpretation of Literature	3	ENG 262 English Literature II	3
Political Science Elective ³	3	ENG 266 American Literature II	3
Free Elective	3	PSY 304 Educational Psychology	3
Physical Education Elective	1	Physical Education Elective	1
	16		16

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 344 School and Society**	3	ED 306 Middle Years Reading	3
ED 435 Meth. & Mat. Middle Yrs. Social Studies	4	ED 307 Teach. Writing Across Curriculum	3
PSY 476 Psychology Adolescent Development	3	ED 309 Teaching in Middle Years	3
SOC 305 Racial & Ethnic Relations**	3	PE 280 Emergency Med. Care & First Aid or	
Humanities/Soc. Sci. Elective	3	PE 285 Personal Health	2
	16	Humanities/Soc. Sci. Elective	3
		Free Elective	3
			17

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 414 Human Relations & Discipline	3	ED 415 Arts & Adolescence	2
ED 430 Methods & Mat. Language Arts	4	Economics Elective ³	3
ED 454/464 Student Teach English/Social Studies	8	English Elective	3
	15	Nonwestern History Elective ⁴	3
		Free Electives	6
			17

Minimum Hours Required for Graduation 128

Recommended Courses:

¹MA 111, 112, 113, 114, 116, 122, 212, and 214. MA 115 is excluded.

²ANT 252

³PS 201 or PS 204

⁴HI 439 or HI 471

⁵EB 201 or EB 403

^{*}Another history course may be elected by those students not planning to teach in North Carolina.

^{**}Junior status is required.

MATHEMATICS AND SCIENCE EDUCATION— DUAL CONCENTRATION (6-9 Certification)

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
BS 100 General Biology	4	ENG 112 Composition & Reading	3
ED 101 Orientation to MA/SCI ED	0	MA 201 Analytic Geometry & Calc. II or	
ENG 111 Composition & Rhetoric	3	MA 212 Analytic Geometry & Calc. B	4-3
MA 102 Analytic Geometry & Calc. I or		MEA 101 Physical Geology	3
MA 112 Analytic Geometry & Calc. A	4	MEA 110 Physical Geology Lab	1
PE 100 Health and Physical Fitness	1	PE 280 Emergency Medical Care or	
History Elective ¹	3	PE 285 Personal Health	2
	15	Social Science Elective ¹	3
		Physical Education Elective	1
			16-17

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry I	4	CH 103 General Chemistry II	4
MA 114 Intro. to Finite Mathematics	3	CSC 101 Intro. to Programming or	
Humanities Elective ¹	3	CSC 200 Intro. to Computers	3
Literature Elective ¹	3	ED 203S Intro. Teach Math/Science	3
Social Science Elective ¹	3	ED 203L Intro. Teach M/S Lab	0
Physical Education Elective	1	MA 122 Mathematics of Finance or	
	17	Humanities Electives ¹	3
		Statistics Elective ²	3
		Physical Education Elective	1
			17

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 306 Middle Years Reading	3	ED 101J Orientation to MA/SCI ED	0
MA 225 Structure of Real Numbers <i>or</i>		ED 309 Teaching in Middle Years	3
MA 403 Intro. to Modern Algebra	3	ED 344 School and Society	3
PSY 304 Educational Psychology	3	PSY 476 Psych. of Adolescent Development	3
PY 221 College Physics	5	Biological Science Elective	3-4
Speech Elective ¹	3	Free Elective	3
	17		15-16

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 470 Methods of Teaching Math ³	3	ED 415 Arts and Adolescence	2
ED 471 Student Teaching in Math ⁴	4	MA 408 Found. Euclidean Geometry	3
ED 474 Teaching Math Middle Years ³	3	Social Science Elective ¹	3
ED 475 Methods of Teaching Science ³	3	Free Electives	6
ED 476 Student Teaching in Science ⁴	4		14
	17		

Minimum Hours Required for Graduation 128

The humanities/social science electives must be chosen from the university's official list of courses. Many courses in philosophy, religion, literature, fine arts, history and foreign language are approved humanities courses. Social science electives come from courses in economics, sociology, anthropology, political science, psychology and geography. Specified courses in speech, education, psychology and university studies are approved as either humanities or social sciences. It is highly recommended that students choose electives so that each of these areas is represented: economics, governmental systems, social systems and fine arts.

¹Statistics elective may be chosen from ST 101, 311, 361, or 371

³These courses are taken together as a block during the fall semester prior to student teaching.

⁴Student teaching is full time for 10 weeks of the fall semester.

MATHEMATICS EDUCATION—SINGLE CONCENTRATION (6-9 Certification)

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CSC 200 Intro. to Computers	3	CSC 101 Intro. to Programming	4
ED 101 Orientation to MA/SCI ED	0	ENG 112 Composition & Reading	3
ENG 111 Composition & Rhetoric	3	MA 201 Analytic Geometry & Calc. II	4
MA 102 Analytic Geometry & Calc. I	4	History Elective ²	3
PE 100 Health & Physical Fitness	1	Social Science Elective ¹	3
PHI 201 Logic	3		17
	14		

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
MA 114 Intro. to Finite Math	3	ED 203 Intro. Teaching Math/Science	3
MA 122 Mathematics of Finance	3	ED 203L Intro. Teaching M/S Lab	0
Literature Elective	3	Humanities Elective ¹	3
Physics or Chemistry Elective	4	Natural Science Elective	4
Social Science Elective ¹	3	Speech Elective ¹	3
Physical Education Elective	1	Statistics Elective ²	3
	17	Physical Education Elective	1
			17

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 344 School and Society	3	ED 101J Orientation to MA/SCI ED	0
MA 225 Structure of Real Numbers <i>or</i>		ED 306 Middle Years Reading	3
MA 403 Intro. to Modern Algebra	3	ED 309 Teaching in Middle Years	3
PSY 304 Educational Psychology	3	ED 480 Teach Math with Microcomputers	3
Humanities Elective ¹	3	MA 408 Found. of Euclidean Geometry	3
Free Elective	3	PE 280 Emergency Medical Care <i>or</i>	
	15	PE 285 Personal Health	2
		Free Elective	3
			17

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 470 Methods of Teaching Math ¹	3	ED 415 Arts and Adolescence	2
ED 471 Student Teaching in Math ⁴	8	MA 433 History of Mathematics	3
ED 474 Teach Math Middle Years ³	3	PSY 476 Psych. of Adolescent Development	3
	14	Social Science Elective ¹	3
		Free Electives	6
			17

Minimum Hours Required to Graduate 128

Note: D grades not accepted in ED 203, 309, 344, 470, 472, 480, PSY 304, MA 102, or MA 112. Not more than one D grade accepted from the teaching field (PHI 201 and courses from math, computer science, and statistics that are part of the teaching specialty).

¹The humanities social science electives must be chosen from the university's official list of courses. Many courses in philosophy, religion, literature, fine arts, history and foreign language are approved humanities courses. Social science electives come from courses in economics, sociology, anthropology, political science, psychology and geography. Specified courses in speech, education, psychology and university studies are approved as either humanities or social sciences. It is highly recommended that students choose electives so that each of these areas are represented: economics, governmental systems, social systems and fine arts.

²Statistics elective may be chosen from ST 101, 311, 361, or 371.

³These courses are taken together as a block during the fall semester prior to student teaching.

⁴Student teaching is full time for 10 weeks of the fall semester.

SCIENCE EDUCATION—SINGLE CONCENTRATION (6-9 Certification)

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry	4	BS 100 General Biology	4
ED 101 Orientation to MA/SCI ED.	0	CH 103 General Chemistry II or	
ENG 111 Composition & Rhetoric	3	CH 107 Principles of Chemistry	4
MA 112 Analytic Geometry & Calc. A or		ENG 112 Composition & Reading	3
MA 113 Intro. to Calculus	4	MA 212 Analytic Geometry & Calc. B or	
PE 100 Health & Physical Fitness	1	ST 311 Intro. to Statistics	3
Humanities/Soc. Sci. Elective ¹	3	Physical Education Elective	1
	15		15

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
PY 211 General Physics or		BO 200 Plant Life	4
PY 221 College Physics	4-5	ED 203 Intro. to Teach Math/Sci ²	3
History Elective ¹	3	PE 280 Emer. Med. Care & First Aid or	
Humanities/Soc. Sci. Elective ¹	3	PE 285 Personal Health	2
Speech Elective	3	PY 212 General Physics or	
Free Elective	3	Physics Elective	3-4
Physical Education Elective	1	Literature Elective ¹	3
	17-18	Physical Education Elective	1
			16-17

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 344 School and Society	3	ED 306 Middle Years Reading	3
MEA 101-110 General Physical Geology	4	ED 309 Teaching in the Middle Years	3
PSY 304 Educational Psychology	3	PSY 476 Psych. of Adolescent Develop.	3
Humanities/Soc. Sci. Electives ¹	6	ZO 201 General Zoology	4
	16	Humanities/Soc. Sci. Elective ¹	3
			16

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ED 414 Human Rel. & Discipl. Clsrm. ³	3	ED 415 Arts and Adolescence	2
ED 475 Methods of Teaching Science ³	3	Earth Science Elective	3
ED 476 Student Teaching in Science ³	8	Humanities/Soc. Sci. Elective ¹	3
ED 477 Instruct. Mat. in Science ³	2	Science Elective	3
	16	Free Electives	6
			17

Minimum Hours Required for Graduation 128

¹To be selected as follows from the Humanities and Social Sciences (24 hours total):

One course in history (3 cr. hrs.)

One course in literature (3 cr. hrs.)

Three additional courses from any of the following humanities:

fine arts, foreign language, history, literature, philosophy, religion (9 cr. hrs.)

Three courses from any of the following social sciences:

anthropology, economics, geography, political science, sociology, psychology (9 cr. hrs.)

²Offered only during spring semester

³These courses are taken as a block in the professional semester—offered *only* during the fall semester. Student cannot enroll for courses other than those listed as a part of the professional semester.

PSYCHOLOGY

Poe Hall (Room 640)

Professor P. W. Thayer, Head of the Department and Coordinator of Advising

Professors: J. W. Cunningham, D. W. Drewes, T. E. LeVere, S. E. Newman, B. W. Westbrook; *Professors Emeriti:* K. L. Barkley, H. M. Corter, J. C. Johnson, H. G. Miller; *Associate Professors:* J. L. Cole, J. W. Kalat, K. W. Klein, J. E. R. Luginbuhl, D. H. Mershon, F. J. Smith, S. S. Snyder, N. W. Walker; *Adjunct Associate Professors:* B. F. Corder, J. L. Howard; *Associate Professors Emeriti:* J. W. Magill, M. L. Pitts, R. F. Rawls; *Assistant Professors:* L. E. Baker-Ward, W. P. Erchul, D. O. Gray, T. M. Hess, P. F. Horan, S. B. Pond, D. Scott-Jones, Y. Y. Yeh; *Adjunct Assistant Professors:* B. Braddy, A. D. Hall, C. L. Kronberg, L. A. Makoid; *Associate Members of the Faculty:* R. G. Pearson (Industrial Engineering), J. L. Wasik (Statistics); C. D. Korte (University Studies).

Psychology is one of the basic university disciplines. Mastery of some of the knowledge in psychology is necessary to practitioners in education, health, social service, social sciences and managerial professions. Students holding the bachelor's degree in psychology and wishing to apply their psychological studies in a professional capacity generally continue their education in a graduate program such as applied or experimental psychology, or in such fields as law, medicine, business, social work and a variety of other fields. Students in psychology may also choose to enter business or government often without further training beyond the bachelor's degree. There are currently two different programs for undergraduate majors in psychology: the General Option (PSY), and the Human Resource Development Option (HRD). Each program emphasizes different aspects of the study of psychology. The following sections provide separate descriptions of these programs and their current requirements.

Within each of the options, there are Honors tracks which provide special curricula and an opportunity for work with faculty on research projects. Students must have completed a minimum of 45 semester hours of course work (at least 15 at NCSU) and have a grade point average of 3.25 or better to be considered for admission to an Honors program. More details as to admission and requirements are available from the Psychology Department.

All undergraduate majors are members of the Psychology Club which provides a number of enrichment activities, including sponsorship of the Carolinas Psychology Conference. One of the largest undergraduate conferences in the United States, it is held annually in cooperation with Meredith College and other Cooperating Raleigh Colleges. There is also an active chapter of Psi Chi, the national psychology honor society, which provides enrichment to the program.

PSYCHOLOGY: GENERAL OPTION

The General Option is oriented toward the student who wants a broad understanding of the types of problems with which psychology is concerned and the ways in which psychologists approach and attempt to solve these problems. Curriculum requirements in the

General Option are sufficiently flexible for students to concentrate, if they wish, in another area of study as well as psychology, and thereby prepare themselves for a variety of careers or professional graduate programs. By wise choice of elective courses a student can prepare for medical, legal, business, or education graduate training, while at the same time acquiring a basic background in the social sciences.

REQUIREMENTS

Major Field of Study:	Credits
PSY 200 Introduction to Psychology	3
PSY (ST) 240 Intro. Research Methods I	3
PSY (ST) 241 Intro. Research Methods I Lab	2
PSY (ST) 242 Intro. Research Methods II	3
PSY (ST) 243 Intro. Research Methods II Lab	1
Two courses from (Group 1):	6
PSY 300 Perception	
PSY 310 Learning and Motivation	
PSY 320 Cognitive Processes	
PSY 330 Biological Psychology	
Three courses (one each from three different sets in Group 2):	9
PSY 307 or 340 Industrial Psychology or Ergonomics	
PSY 376, 475 or 476 Developmental Psychology	
PSY 370 or 470 Personality and Abnormal Psychology	
PSY 411 or 412 Social or Applied Psychology	
PSY 436 Introduction to Psychological Measurement	
PSY Electives	6
	33

English Courses:	
ENG 111, 112 English Composition	6
ENG 321 or SP 110, 112, 201, or 202	3
	9

Mathematics Courses:	
Two mathematics courses (not MA 100, 115 or 116 and not 111 by retroactive credit)	6-7
One computer science course	2-3
	8-10

Humanities and Social Science Courses:	
Two literature courses	6
Three history or social science courses	9
PHI 201, 311, 335, 340 or 341	3
One other philosophy course	3
	21

Natural Science Courses:	
BS 100 or 105	4
Two natural science courses (at least one with lab)	6-7
	10-11

Restricted Electives:	
Five courses in an approved grouping related to student's future plans	15

Free Electives:	
To meet minimum total hours required for graduation	21-24

Physical Education:	
PE 100 Health & Physical Fitness	1
Three courses	3
Minimum Hours Required for Graduation	124

Students should consult the Psychology Department for detailed information as to which courses will satisfy mathematics, natural science, literature and social science requirements.

CURRICULUM DISPLAY

FRESHMAN YEAR			
Fall Semester	Credits	Spring Semester	Credits
BS 100 or 105 General Biology	4	ENG 112 Composition & Reading	3
ENG 111 Composition & Rhetoric	3	History or Social Science	3
PE 100 Health and Physical Fitness	1	Natural Science	3-4
PSY 200 Intro. to Psychology	3	Philosophy	3
Mathematics	4	Free Elective	3
	15	Physical Education Elective	1
			16-17

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
PSY 240 Intro. Behavioral Research I	3	PSY 242 Intro. Behavioral Research II	3
PSY 241 Intro. Behavioral Res. I Lab	2	PSY 243 Intro. Behavioral Res. II Lab	1
History or Social Science	3	Computer Science	2-3
Literature	3	History or Social Science	3
Mathematics	3-4	Natural Science	3-4
Physical Education Elective	1	Philosophy	3
	15-16	Physical Education Elective	1
			16-18

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
Required PSY—Group 1	3	Literature	3
Restricted Elective	3	Required PSY—Group 1	3
Speech or Tech. Writing	3	Required PSY—Group 2	3
PSY Elective	3	Restricted Elective	3
Free Elective	3	Free Elective	3
	15		15

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
Required PSY—Group 2	3	Required PSY—Group 2	3
PSY Elective	3	Restricted Elective	3
Restricted Electives	6	Free Electives	9
Free Elective	3		15
	15		

Required PSY—Group 1: two courses from PSY 300, 310, 320, 330

Required PSY—Group 2: one course from any three sets

- PSY 307 or 340
- PSY 376, 475 or 476
- PSY 370 or 470
- PSY 411 or 412
- PSY 436

Minimum Hours Required for Graduation 124

PSYCHOLOGY: HUMAN RESOURCE DEVELOPMENT OPTION

The Human Resource Development (HRD) Option is designed to provide a groundwork of skills and experience for students who wish to enter human service careers with a B.A. degree. With appropriate curriculum modifications, the program can also provide a sound background for students who wish to go into advanced degree programs in psychology, management, personnel, social work, counselling, guidance, education, and other areas. Students interested in graduate school should confer with their advisors in order to plan an appropriate course of study.

The HRD Option focuses on enabling students to gain direct experience in the areas in which they would like to work. HRD students devote a semester to learning principles and skills related to working with human problems, and subsequently each HRD student spends a semester working part-time or full-time in a job related to his/her own area of interest. The HRD Option accepts a maximum of 20 students each year. Interested students can apply for admission to HRD during their sophomore or junior year. Further information and application forms are available in the Psychology Department Office.

REQUIREMENTS

Major Field of Study:

PSY 200 Introduction to Psychology	3
PSY (ST) 240 Intro Research Methods I	3
PSY (ST) 241 Intro Research Methods I Lab	2
PSY (ST) 242 Intro Research Methods II	3
PSY (ST) 243 Intro Research Methods II Lab	1
PSY 210 Psychological Analysis Applied to Current Problems or	
PSY 412 Psychological Research Applied to Current Problems	3
PSY 350 HRD Skills	3
PSY 495 HRD Practicum	6-11

PSY 499 Individual Study in Psychology	4
PSY Electives	9
	37-42
<i>English Courses:</i>	
ENG 111, 112 English Composition	6
Two courses from ENG 321, SP 110, 112, 201 or 202	6
	12
<i>Mathematics Courses:</i>	
Two mathematics courses (not MA 100, 115 or 116, and not 111 by retroactive credit)	6-7
One computer science	2-3
	8-10
<i>Humanities and Social Science Courses:</i>	
Two literature courses	6
Three history or social science courses	9
PHI 201, 311, 335, 340 or 341	3
One other philosophy course	3
	21
<i>Natural Science Courses:</i>	
BS 100 or 105	4
Two natural science (at least one with lab)	6-7
	10-11
<i>Restricted Electives:</i>	
Three courses in an approved grouping related to student's future plans	9
<i>Free Electives:</i> As needed to meet minimum hours required for graduation	15-21
<i>Physical Education:</i>	
PE 100 Health and Physical Fitness	1
Three courses	3
Minimum Hours Required for Graduation	124
Students should consult the Psychology Department for detailed information as to which courses will satisfy mathematics, natural science, literature, and social science requirements.	

CURRICULUM DISPLAY

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
BS 100 or 105 General Biology	4	ENG 112 Composition & Reading	3
ENG 111 Composition & Rhetoric	3	History or Social Science	3
PE 100 Health and Physical Fitness	1	Natural Science	3-4
PSY 200 Intro. to Psychology	3	Philosophy	3
Mathematics	4	Free Elective	3
	15	Physical Education Elective	1
			16-17

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
PSY 240 Intro. Behavioral Research I	3	PSY 242 Intro. Behavioral Research II	3
PSY 241 Intro. Behavioral Res. I Lab	2	PSY 243 Intro. Behavioral Res. II Lab	1
History or Social Science	3	Computer Science	2-3
Literature	3	History or Social Science	3
Mathematics	3-4	Natural Science	3-4
Physical Education Elective	1	Philosophy	3
	15-16	Physical Education Elective	1
			16-18

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
PSY 210 or 412	3	PSY 495	3-8
PSY 350	3	PSY 499	4
PSY 495	3	PSY Elective	3
SP 112	3	Free Elective	3-6
Restricted Elective	3		16-18
Free Elective	3		
	18		

SENIOR YEAR

Fall Semester

	Credits
Literature	3
PSY Elective	3
Restricted Elective	3
Free Electives	6
	15

Spring Semester

	Credits
PSY Elective	3
Restricted Elective	3
Speech or Tech. Writing	3
Free Electives	3-6
	12-15

Minimum Hours Required for Graduation 124

SOCIAL STUDIES TEACHER EDUCATION

Associate Professor C. W. Harper, Coordinator of Advising

Students desiring to become secondary social studies teachers in grades 9-12 will be enrolled in the School of Humanities and Social Sciences. Curriculum requirements for the teacher education options can be found under history, political science and public administration, and sociology and anthropology in that school's section. Students desiring to become social studies teachers in grades 6-9 will be enrolled in the School of Education.

SPANISH TEACHER EDUCATION

Associate Professor A. Malinowski, Coordinator of Advising

Students desiring to become teachers of Spanish will be enrolled in the School of Humanities and Social Sciences. The curriculum requirements for the teacher education option in Spanish can be found under Foreign Languages and Literature in that school's section.



SCHOOL OF ENGINEERING

Page Hall (Rooms 115 and 116)

L. K. Monteith, *Dean*

G. F. Bland, *Associate Dean for Undergraduate Programs*

T. S. Elleman, *Associate Dean for Research Programs*

J. K. Ferrell, *Associate Dean for Graduate Programs*

H. Winston, *Director of Academic Affairs*

B. Houck, *Director of Engineering Special Programs*

B. D. Pettis, *Director of Minority Student Services*

F. M. Richardson, *Director of Extradepartmental Degree Programs*

R. M. Turner, *Director for Admissions and Transfers*

W. T. Holloman, *Senior Cooperative Education Coordinator*

Young men and women who seek a challenging technical career in research and development, design, construction, production, maintenance, technical sales, management, teaching, or other careers requiring a methodical, creative solution of problems, should consider an engineering education. At NCSU, the School of Engineering has a distinguished and internationally recognized faculty. The faculty, together with the curricula of the undergraduate and graduate programs, offer an opportunity for ambitious young men and women to become the leaders and prime movers of our increasingly technological world. Because of the great influence of science and technology on our everyday lives, today's engineer must be acutely aware of, and responsible for, the impact that his or her creations may have on society. In addition to safety, aesthetics, economics, and energy, today's engineer must consider environmental, sociological, and other "human concern costs."

The school's 25,000 graduates may be found in widely diversified careers throughout the world. Most are, of course, practicing in the engineering profession, but because their engineering education has equipped them well to deal with problems in a wide variety of fields, many engineering graduates have become corporate presidents, leaders in government, lawyers, and medical doctors, to name a few.

The School of Engineering is organized into nine departments: Biological and Agricultural, Chemical, Civil, Electrical and Computer, Industrial, Materials Science and Engineering, Mechanical and Aerospace, Nuclear, and Textile Engineering and Science. Fourteen undergraduate degree programs are offered in these nine departments. In addition, a degree program in Engineering is offered by special arrangement to the very few engineering students who can clearly demonstrate the need for an individualized program of study. Most departments offer advanced studies leading to professional degrees, master's degrees and Doctor of Philosophy degrees. (See listing of graduate degrees offered.)

The School of Engineering requests and receives accreditation from the Accrediting Board for Engineering and Technology (ABET) for ten of its undergraduate degree programs. Accreditation insures that these programs satisfy the minimum requirements for acceptance by this nationally recognized agency for accrediting engineering degree programs. All curricula and programs are designed to maintain the school's national and international reputation while meeting the needs of the people and industries of the state and region through effective instruction, competent research, and the development of new and meaningful contributions to engineering knowledge.

A Career Planning and Placement Center is maintained by the university to assist continuing students and graduating students to achieve their career goals.

UNDERGRADUATE CURRICULA AND DEGREES

Incoming freshmen accepted into the School of Engineering are enrolled in a basic engineering program, Engineering Undesignated, for a period of one to two years. After successfully completing the Engineering Undesignated requirements, a student enters a specific engineering degree program.

The first-year engineering curriculum is common to all undergraduate engineering degree programs. Entering students receive assistance in planning an appropriate program of study and have available continued guidance from an academic adviser throughout their academic careers.

In order to be eligible to apply for admission into an engineering degree program, Engineering Undesignated students must successfully complete the following courses: MA 102 or 102S and MA 201 or 201S; PY 205; ENG 111; CH 101 and either CH 105 or CH 107; and at least one humanities or social science course.

Bachelor of Science—The baccalaureate program provides preparation for entry into industry, government, business or private practice as well as graduate school. Graduates with a BS degree in engineering may be engaged in design, development, production/construction, sales, maintenance, or the planning, operation, or management of industrial units.

The undergraduate curricula offer programs of study leading to a bachelor's degree in aerospace engineering, biological and agricultural engineering, chemical engineering, civil engineering, civil engineering construction option, construction management, computer engineering, electrical engineering, engineering, furniture manufacturing and management, industrial engineering, materials science and engineering, mechanical engineering, nuclear engineering, and textile engineering. Graduation requirements include the satisfactory completion of the specified number of credit hours of required courses and electives in any one of the fifteen curricula. Students must also earn an overall grade point average of 2.0, and a grade point average of 2.0 in their major courses. The total number of required hours ranges from 132 to 139 semester hours.

Double Degree Programs—NCSU students may wish to earn a bachelor of science degree in *two fields of engineering*. When the two courses of study are planned sufficiently early to optimize the student's time, it is often found that courses required in one field may be substituted for required courses in the second field. The humanities/social science, physics, mathematics, chemistry, English and physical education sequences are common to most fields. In addition, required courses in one field can be used as free electives in other fields. This type of double degree program can usually be completed in five years. Students interested in such a program should consult the Director of Admissions and Transfers, and the department heads of the two courses of study.

Other students may wish to *combine* a bachelor of science in *engineering* with a bachelor of science or bachelor of arts degree in *some other school at North Carolina State University*. As in the double engineering degree program, it is often found that courses required in one school may be substituted for courses required in a second school. When two academic programs are planned sufficiently early to optimize the student's time, this type of double degree program can usually be completed in five years. Students interested in this double degree program should contact either their Coordinator of Advising or the Director of Admissions and Transfers, and the Dean of the school offering the non-engineering degree.

TRANSFER PROGRAM

Students with non-engineering degrees or one to three years of academic work completed at other institutions may apply for transfer admission to the School of Engineering through the University Admissions Office. Students are admitted from appropriate programs from four-year institutions, as well as junior and community colleges.

Students currently attending or anticipating attendance at other institutions are advised to contact the Director of Admissions and Transfers for information relative to transfer GPA required, transferable credits, etc.

PROFESSIONAL DEGREES IN ENGINEERING

The School of Engineering offers professional curricula leading to the degrees of Chemical Engineer, Civil Engineer, Electrical Engineer, Industrial Engineer, Materials Engineer, Mechanical Engineer, and Nuclear Engineer. These programs of study are designed to fit the needs of students desiring intensive specialization in a particular field, or additional work not ordinarily covered in the normal undergraduate curricula. For further details, see "PROFESSIONAL DEGREES."

PURCHASE OF COMPUTERS BY ENGINEERING STUDENTS

Freshman year courses for engineering students are usually in the areas of science, mathematics, and other subjects which are preparatory to the study of engineering. Whereas the use of a computer can be helpful for word processing of English papers and other written assignments, engineering students normally do not need access to a computer during their freshman year.

In the sophomore year, most students will take a course in computer programming and, thereafter, will increasingly use computers as an engineering tool. The school policy is that all engineering students will be provided with the computer resources, time and equipment, which are required to successfully complete their course of study.

However, some students may find that owning a computer is beneficial in terms of convenience and ready access to computational capability. Since different departments within the school have different course and computer language requirements, the school recommends that new students who decide to purchase a personal computer should not do so until they have been admitted into an engineering degree program.

TYPICAL FRESHMAN YEAR IN ALL ENGINEERING CURRICULA

PREREQUISITE REQUIREMENTS FOR ALL STUDENTS IN THE SCHOOL OF ENGINEERING

Before an engineering student is eligible to enroll in a 200 or higher level engineering course that is a required course in the student's engineering curriculum, the student must have earned a "C" or better grade in English 111, Mathematics 102, Mathematics 201, Physics 205, and the student must have satisfied any other prerequisite requirements of the student's degree program. The above "C or better" prerequisites are also graduation requirements.

Fall Semester	Credits	Spring Semester	Credits
CH 101 General Chemistry	4	CH 105 Chemistry-Principles & Appl.*****	3
E 100A Introduction to Engr. I**	0	E 100B Introduction to Engr. II**	1
ENG 111 Composition and Rhetoric***	3	ENG 112 Composition & Reading***	3
GC 101 Engineering Graphics*	2	GC 101 Engineering Graphics*	2
MA 102 Analytic Geom. & Calculus I****	4	MA 201 Analytic Geometry & Calc. II****	4
PE 100 Health and Physical Fitness	1	PY 205 General Physics	4
Humanities/Soc. Sci. Elective*****	3	Physical Education Elective	1
	15 or 17		18 or 16

The program above is typical. Other courses may be substituted, added, or deleted, depending upon each student's individual background and talents. Individual programs typically range from 28 to 36 credits.

*Students enroll in GC 101 either in the fall or the spring semester. Students who plan to enroll in CH 107 in the spring semester should take GC 101 during the fall.

**All students must enroll in E 100A for the fall semester and E 100B for the spring semester.

***Qualified students, so notified at freshman orientation, will take ENG 112H, in the spring semester.

****Students who intend to major in electrical engineering or computer engineering should enroll in MA 102S and MA 201S.

*****The humanities and social science courses usually recommended for new students are EB 201, HI 205, PSY 200, or SOC 202. Students who intend to major in biological or agricultural engineering should take EB 201 or EB 212.

*****Students who intend to major in chemical engineering, materials science and engineering, or textiles engineering or who expect to take additional chemistry courses will take CH 107, Principles of Chemistry, instead of CH 105. These students should enroll in GC 101 in the fall semester

HUMANITIES AND SOCIAL SCIENCES

Each engineering student is required to take a minimum of 18 credit hours of humanities and social science courses. All of the courses used to satisfy the humanities and social science requirement must be taken from the School of Engineering list of approved courses. The courses will be distributed as designated below:

1. A beginning economics course, EB 201 or EB 212.
2. A course in the history of science or the philosophy of science. Suitable courses are shown on the following list.
 - HI 321 Ancient and Medieval Science
 - HI 322 Rise of Modern Science
 - HI 341 Technology in History
 - HI 481 History of the Life Sciences
 - PHI 340 Philosophy of Science
 - PHI 341 Topics in the Philosophy of Science
 - UNI 301 Science and Civilization
 - UNI 302 Contemporary Science and Human Values
3. Two courses, at least one of which must be an advanced course, from one of the following humanities groups.
 - English Language Literature (ENG)
 - Foreign Language Literature (FL, GRK, LAT)
 - History (HI)
 - Philosophy (PHI)
 - Religion (REL)
 - Speech-Communication (SP)
4. Two courses, at least one of which must be an advanced course, from one of the following social science groups.
 - Anthropology (ANT)
 - Economics (EB)
 - Political Science (PS)
 - Psychology (PSY)
 - Sociology (SOC)

Note: The beginning economics course specified in (1) may be used with an advanced economics course to satisfy the social science requirement (4) above. If so, an additional course must be completed and any course from the School of Engineering list of approved humanities and social science courses may be used for this purpose. Students may obtain a copy of the list from their Coordinator of Advising.

R.J.R. NABISCO TUTELAGE PROGRAM

An important service offered to engineering freshmen and first-semester sophomores is the R.J.R. Nabisco program. This program provides academic assistance to new students as they make the adaptation to the pace and requirements of university studies. The program provides problem sessions and small group tutoring sessions which focus on most freshmen and sophomore-level courses required for engineering. Interested students should contact the Director of Engineering Special Programs.

ENGINEERING SCHOLARS PROGRAM

The **Engineering Scholars Program** has as its goal the promotion of research and academic careers in engineering. Under the sponsorship of the School of Engineering, in cooperation with the Division of Student Affairs, Scholars begin by living together and participating in special educational seminars, cultural enrichment activities, and scholars sections for some coursework. In the sophomore year, Engineering Scholars begin research apprenticeships with engineering faculty members. Additional information may be obtained by contacting departmental program representatives.

COOPERATIVE EDUCATION PROGRAM

This optional program is planned so that the student may alternate semesters of study with semesters of work during the sophomore and junior academic levels. The freshman and senior years are spent on campus while the sophomore and junior academic levels are spread over a three-year period to permit the alternating of the academic semesters with practical work experience semesters. Students earn a salary while they are in industry, and may earn a sufficient income to finance much of their engineering education. The co-op plan normally takes five years for completion during which time the student receives 12 to 18 months of practical engineering experience.

Students in all curricula in engineering may apply if they have a grade-point average of 2.25 or better. After a student is accepted for employment, he or she is expected to maintain at least a 2.0 grade-point average. Application for admission into the co-op program should be made early in the spring semester of the freshman year; however, later applications resulting in fewer work semesters prior to graduation will be considered during the sophomore year or the first semester of the junior year. Students must be admitted into an engineering degree program prior to beginning the first co-op assignment. Further information may be obtained from the Coordinators of Cooperative Engineering Education, 115 Page Hall.

STUDENT ACTIVITIES

Each curriculum in the School of Engineering has a technical society open to every student enrolled in the curriculum. In most cases, these are student chapters of national professional organizations. Each curriculum also has one or more honor societies to give recognition to those with superior academic records. In addition, there are school-wide honor, professional, and service societies that offer personally and educationally rewarding opportunities for students. Student representatives of each curriculum serve on the Engineers' Council, which is the coordinating agency for school-wide activities such as the Engineer-in-Training (EIT) examination review classes, the Engineers' Week Exhibition, and the annual St. Patrick's Day Dance, and the Southern Engineer.

BIOLOGICAL AND AGRICULTURAL ENGINEERING

(Also see Agriculture and Life Sciences.)

David S. Weaver Laboratories (Room 100)

Professor F. J. Humenik, Interim Head of the Department

Professor G. B. Blum, Jr., Coordinator of Advising

(For a list of faculty, see Agriculture and Life Sciences.)

Students in biological and agricultural engineering train to deal with problems of agriculture that are engineering in nature. Scientific and engineering principles are applied to the conservation and utilization of water and soil, the development of power and labor-saving devices for all phases of agricultural production, the design of structures and equipment for housing and handling livestock and field products, and the processing and marketing of farm products.

OPPORTUNITIES

Biological and agricultural engineers are qualified for positions in design, development and research in public institutions and in industry, and for teaching and extension work in institutions of higher education. The curriculum provides adequate training for postgraduate work leading to advanced degrees (see listing of advanced degrees offered). The

biological and agricultural engineering science curriculum displayed below is accredited by the Accreditation Board for Engineering and Technology (ABET) and leads to the degree of Bachelor of Science in Biological and Agricultural Engineering.

CURRICULUM IN BIOLOGICAL AND AGRICULTURAL ENGINEERING

The science curriculum in biological and agricultural engineering develops young people capable of engineering leadership in agriculture. Emphasis is placed on basic science courses such as mathematics, physics, mechanics, biology, soils, and thermodynamics, which provide a sound background for engineering and agricultural technology. Courses in biological and agricultural engineering are directed to those methods of thought and techniques whereby science can be applied with understanding and judgment to engineering situations related to agricultural operations.

Since training in biological and agricultural engineering involves two distinct technical fields—agriculture and engineering—the science curriculum is a joint responsibility of the two schools and is so administered. Undergraduate students may officially enroll in either school; duplicate undergraduate records are maintained.

See the freshman year for the School of Engineering and special note for biological and agricultural engineering. Freshman year credits equal 36 hours.

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
BAE 151 Elements of Bio. & Agri. Engr. I	2	BAE 252 Elements of Bio. & Agri. Engr. II	4
BS 100 General Biology	4	MA 301 Appl. Diff. Equations I	3
MA 202 Analytic Geometry & Calc. III	4	MAE 208 Engr. Dynamics	3
MAE 206 Engr. Statics	3	MAE 308 Fluid Mechanics I	3
PY 208 General Physics	4	SSC 200 Soil Science	4
Physical Education Elective	1	Physical Education Elective	1
	18		18

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
BAE 471 Soil & Water Engr.	4	BAE 342 Agri. Processing	4
MAE 301 Engr. Thermodynamics I	3	BAE 361 Analytical Methods	3
MAE 314 Solid Mechanics	3	ECE 211 Electrical Circuits I	3
ST 361 Intro. to Stat. for Engrs.	3	ECE 213 Electrical Circuits I Lab	1
Free Elective	3	ENG 321 Comm. Tech. Info.	3
	16	Hist. or Phil. of Sci.	3
			17

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
BAE 391 Electrotech. Bio. & Agri. Engr.	3	BAE 452 Agri. Engr. Design II	2
BAE 451 Agri. Engr. Design I	4	BAE 462 Funct. Des. of Field Mech.	3
BAE 481 Agri. Structures & Env.	4	Engr. Science Elective	3
Humanities/Soc. Sci. Elective	3	Advanced Humanities Elective	3
Free Elective	3	Advanced Social Sci. Elective	3
	17	Free Elective	3
			17

Minimum Hours Required for Graduation ... 139

Social science and humanities electives will be selected from the listing of the School of Engineering.

The curriculum above is for the science program in biological and agricultural engineering. For the technology curriculum, see Agriculture and Life Sciences.

CHEMICAL ENGINEERING

Riddick Engineering Laboratories (Room 113)

Professor H. B. Hopfenberg, Head of the Department

Associate Professor C. J. Setzer, Associate Head of the Department

Professor R. M. Felder, Graduate Administrator

Professor D. B. Marsland, Undergraduate Administrator

Professors: R. G. Carbonell, R. M. Felder, J. K. Ferrell, R. P. Gardner, A. S. Michaels, D. B. Marsland, D. C. Martin, D. F. Ollis, M. R. Overcash, E. P. Stahel, V. T. Stannett; *Adjunct Professors:* A. R. Berens, W. J. Koros, F. O. Mixon, D. M. Preiss, P. R. Sperry, D. R. Squire; *Professors Emeriti:* K. O. Beatty, J. F. Seely; *Associate Professors:* P. S. Fedkiw, C. K. Hall, P. K. Lim, C. J. Setzer, H. Winston; *Adjunct Associate Professors:* D. A. Denny, D. S. Ensor, M. E. Mullins, J. L. Williams; *Assistant Professors:* C. M. Balik, R. T. Chern, P. K. Kilpatrick, H. H. Lamb, S. W. Peretti, S. Torquato.

The sound management of material and energy resources, taking into account natural, economic, and environmental constraints, guides the performance of chemical engineering practice. Chemical engineering education integrates design and analysis, science and technology, with communication skills developed through exposure to the humanities and the social and economic sciences. Chemical engineering organizes these diverse skills into a coherent discipline uniquely suited to the needs of the petroleum, plastics, textile, and pulp and paper industries.

FACILITIES

Departmental teaching and research activities are based on the four floors comprising the east wing of the Riddick Engineering Laboratories. Equipment for studying the principles of fluid flow, heat transfer, distillation, absorption, drying, crystallization, and filtration is maintained in several laboratories. Chemical reaction kinetics including the kinetics of radiation-induced polymerization reactions are studied on specially designed equipment. Extensive apparatus is available for characterizing the relationships between molecular structure and bulk properties of polymers.

A 2,000 square foot biotechnology laboratory has been equipped to include a pilot plant for studying biologically mediated chemical reactions. Specialized digital computational equipment complements campus-wide university computer resources. The department makes constant use of its fully expanded VAX 11/750 minicomputer which is accessible for use 24 hours a day by students and faculty.

OPPORTUNITIES

Competition for chemical engineering graduates at all degree levels is intense. Graduates readily find employment at extremely attractive salaries in diverse subdisciplines including research and development, production, management and administration; process control, technical service, and sales; estimation and specification writing; consulting and teaching. Students desiring careers in teaching or consulting are advised to consider graduate training (see listing of graduate degree offered). Chemical engineering graduates often pursue careers in law or the medical sciences since the broadly structured undergraduate curriculum provides strong preparation for graduate study in a wide range of professional specialties.

CURRICULUM IN CHEMICAL ENGINEERING

The successful practice of chemical engineering requires a broad, diversified preparation. The spirit of research and experimental inquiry is vital; students, therefore, require sound scientific backgrounds essential to original and disciplined thought, enthusiastic inquiry and, ultimately, original and constructive accomplishment. The undergraduate curriculum emphasizes the scientific, engineering, and economic principles involved in the design and operation of chemical processes. The background in organic, physical, and inorganic chemistry is comparable to the training offered to chemistry majors. Mathe-

matics, physical sciences, and distributed humanities courses are also required. The chemical engineering program, which is accredited by the Accreditation Board for Engineering and Technology (ABET), leads to the degree Bachelor of Science in Chemical Engineering.

See the freshman year for the School of Engineering.

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 221 Organic Chemistry I	4	CH 223 Organic Chemistry II	4
CHE 205 Chemical Process Principles	4	CHE 225 Chemical Process Systems	3
MA 202 Analytic Geometry & Calculus III	4	ECE 331 Principles of Elec. Engr.	3
PY 208 General Physics	4	MA 301 Appl. Differential Eq. I	3
Physical Education Elective	1	Humanities/Soc. Sci. Elective ²	3
	<u>17</u>	Physical Education Elective	1
			<u>17</u>

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 315 Quantitative Analysis	4	CHE 312 Transport Processes II	3
CHE 311 Transport Processes I	3	CHE 316 Thermo. of Chem. & Phase Equilibria ..	3
CHE 315 Chem. Process Thermodynamics	3	CHE 330 Chemical Engr Lab I	2
EB 201 Economics I or		Humanities/Soc. Sci. Elective ²	3
EB 212 Econ. of Agriculture	3	Technical Elective ¹	3
MAT 201 Struct. & Prop. of Engr. Mat'ls	3	Free Elective	3
	<u>16</u>		<u>17</u>

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 437 Physical Chemistry for Engineers	4	CHE 425 Process Syst. Anly. & Control	3
CHE 331 Chemical Engr Lab II	2	CHE 451 Chemical Engr. Design	3
CHE 421 Design & Anly. of Unit Oper.	3	Humanities/Soc. Sci. Elective ²	3
CHE 446 Design & Anly. of Chem. Reactors	3	Technical Elective ¹	3
CHE 495 Seminar in Chem. Engr.	1	Free Electives	6
Humanities/Soc. Sci. Elective ²	3		<u>18</u>
	<u>16</u>		

Minimum Hours Required for Graduation 135

NOTE: This curriculum applies to students entering the university after May '85.

¹CHE 497 Chemical Engr. Projects strongly recommended as one of the Technical Electives.

²Humanities and Social Sciences requirement courses must be selected from the approved School of Engineering list and according to school guidelines.

BIOSCIENCES OPTION IN CHEMICAL ENGINEERING

By enhanced exposure to the biological sciences, the biosciences option in chemical engineering enables the student to develop insight into biological systems and processes.

See the freshman year for the School of Engineering.

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 221 Organic Chemistry I	4	ECE 331 Principles of Elec. Engineering I	3
CHE 205 Chemical Proc. Principles	4	CH 223 Organic Chemistry II	4
MA 202 Anly. Geometry & Calc. III	4	CHE 225 Chemical Proc. Systems	3
PY 208 General Physics	4	MA 301 Applied Differential Equations I	3
Physical Education Elective	1	Humanities/Soc. Sci. Elective ¹	3
	<u>17</u>	Physical Education Elective	1
			<u>17</u>

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
BS 100 General Biology	4	BCH 451 Introductory Biochemistry	3
CHE 311 Transport Processes I	3	BCH 452A Introductory Biochemistry Lab	1
CHE 315 Chem. Proc. Thermodynamics	3	CHE 312 Transport Processes II	3
EB 201 Economics I or		CHE 316 Thermo. Chemical & Phase Equilibria ..	3
EB 212 Economics of Agriculture	3	CHE 330 Chemical Engineering Lab I	2
MAT 201 Structure & Prop. Engr. Mat'ls	3	Humanities/Soc. Sci. Elective ¹	3
	16	Free Elective	3
			18

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credit</i>
CH 437 Physical Chemistry for Engineers	4	CHE 425 Process System Analysis & Control	3
CHE 331 Chemical Engr. Lab II	2	CHE 451 Chemical Engr Design	3
CHE 421 Design & Anly. of Unit Oper.	3	CHE 551 Biochemical Engineering	3
CHE 446 Design & Anly. of Chem. Reactors ..	3	Humanities/Soc. Sci. Elective ¹	3
CHE 495 Seminar in Chem. Engr.	1	Free Electives	6
Humanities/Soc. Sci. Elective ¹	3		18
	16		

Minimum Hours Required for Graduation ... 136

NOTE: This curriculum applies to students entering the university after May '85.

¹Humanities and social science requirement courses must be selected from the approved School of Engineering list and according to school guidelines.

CIVIL ENGINEERING

Mann Hall (Room 211)

Professor P. Z. Zia, Head of the Department

Professor C. L. Heimbach, Associate Head for Undergraduate Programs and Coordinator of Advising

Professor H. E. Wahls, Associate Head for Graduate Programs

Professors: M. Amein, P. D. Cribbins, R. A. Douglas, J. F. Ely, J. S. Fisher, W. S. Galler, A. K. Gupta, K. S. Hayner, Y. Horie, J. W. Horn, D. W. Johnston, P. H. McDonald, C. C. Tung; *Adjunct Professor:* R. C. Heath; *Professors Emeriti:* W. F. Babcock, R. E. Fadum, A. I. Kashef, C. L. Mann, Jr., C. Smallwood, Jr., M. E. Uyanik; *Associate Professors:* S. H. Ahmad, W. L. Bingham, R. H. Borden, A. C. Chao, E. D. Gurley, N. P. Khosla, H. R. Malcom, V. C. Matzen, M. S. Rahman, J. C. Smith, J. R. Stone; *Adjunct Associate Professors:* E. W. Hauser, J. E. Tidwell; *Associate Professor Emeritus:* G. R. Taylor; *Assistant Professors:* R. H. Borden, F. Farid, P. C. Lambe, J. M. Nau, M. F. Overton, W. J. Rastdorf, R. R. Rust, A. E. Schultz; *Adjunct Assistant Professors:* J. C. Brantley, III, L. R. Goode; *Lecturer:* M. L. Leming; *Adjunct Lecturer:* R. F. DeBruhl; *Visiting Extension Specialist:* J. A. K. Tucker.

Civil engineering, one of the broadest of the engineering fields, traditionally concerns the improvement and control of the environment. A civil engineer may deal with the planning, design, construction, operation and maintenance of everything from buildings, bridges, dams, harbors, water and power facilities, sewage disposal works, and nuclear waste facilities to transportation systems like highways, railways, waterways, airports and pipe lines.

The Department of Civil Engineering offers curricula that provide academic preparation for students considering a career in civil engineering or construction. The sound general education of the undergraduate program prepares the student for advanced study either through graduate study or self-study.

The Civil Engineering Program, which is accredited by the Accreditation Board for Engineering and Technology (ABET), leads to the degree Bachelor of Science in Civil Engineering. The Civil Engineering-Construction Option Program, also accredited by ABET, leads to the degree of Bachelor of Science in Civil Engineering-Construction Option. The new Construction Management Program will be presented for accreditation to the American Council for Construction Education (ACCE), following graduation of the first class. This program leads to the degree of Bachelor of Science in Construction Management.

OPPORTUNITIES

Man will always need constructed facilities to live, work and sustain his life, and the civil engineer will always be needed to plan, design and construct these facilities. Civil engineering is such a diversified field that a civil engineering graduate has a wide choice in locations and types of employment. Jobs range from federal, state or municipal agencies to a variety of manufacturing and processing industries, consulting firms or construction companies. The work may be performed partially or wholly in an office or in the field and may be located in a small community, a large industry center or in a foreign country.

FACILITIES

Open access is available to the department's micro-computer laboratory providing support in analysis, design-synthesis and word processing. Laboratories for testing structural materials, large models or full-scale structures, for soils and bituminous products, for hydraulic experiments, for analysis of small structural models, for chemical and biological tests pertaining to sanitary engineering, and for the investigation of transportation problems all help students learn more about their field.

CURRICULA IN CIVIL ENGINEERING

Three four-year undergraduate curricula are offered; one leads to a Bachelor of Science in Civil Engineering; the second, to a Bachelor of Science in Civil Engineering-Construction Option; and the third, to a Bachelor of Science in Construction Management.

The civil engineering curriculum is a balanced program providing academic discipline in the pure and applied physical sciences, the humanities and social sciences, and the professional aspects of civil engineering including structural, transportation and water resources engineering, and soil mechanics and foundations.

The curriculum in the civil engineering-construction option is designed for students interested in the construction phases of civil engineering. It includes the core course requirements in the physical sciences and the social sciences and humanities. The curriculum includes a three-semester sequence of courses in cost analysis and control, and construction methods and planning. These courses provide academic discipline in the engineering, planning and management aspects of construction. Graduates of the construction option curriculum prepare to become construction engineers.

The bachelor of science in construction management is offered for students interested in entering the construction industry in management and administrative functions. Graduates of this curriculum are exposed to the broader construction management problems involving business and finance along with the necessary engineering training. This curriculum features an off-campus internship program during two summers, one between the sophomore and junior year and the second between the junior and senior year, with a construction firm. During the senior year, the student selects a construction concentration in either general construction, mechanical construction or electrical construction. Graduates usually become construction managers responsible for managing a number of construction projects.

CIVIL ENGINEERING CURRICULUM

See the freshman year for the School of Engineering.

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CE 202 Computer Appl. in Civil Engineering	3	CE 215 Engr. Mech.—Dynamics	3
CE 214 Engineering Mechanics—Statics	3	CE 313 Mechanics of Solids	3
IE 311 Engineering Economic Analysis	3	MA 301 Applied Diff. Equations I	3
MA 202 Anly. Geometry & Calc. III	4	MAT 200 Mech. Prop. of Struc. Mat.	2
PY 208 General Physics	4	MEA 120/110 Physical Geology	3
Physical Education Elective	1	Humanities/Soc. Sci. Elective*	3
	18	Physical Education Elective	1
			18

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CE 301 Engineering Surveying	3	CE 305 Traffic Engineering	3
CE 324 Structural Behavior Measurements	1	CE 327 Reinforced Concrete Design	3
CE 325 Structural Analysis	3	CE 342 Engr. Behav. of Soils & Foundations	4
CE 332 Materials of Construction	3	CE 375 Civil Engineering Systems	3
CE 382 Hydraulics	4	CE 383 Hydrology & Urban Water Systems	3
Humanities/Soc. Sci. Elective*	3		16
	17		

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CE Approved Elective (Engr. Design A)**	3	CE Approved Elective (Engr. Design B)**	3
Approved Elective (Engr. Science)***	3	Advised Elective****	3
Advised Electives****	6	Humanities/Soc. Sci. Elective*	6
Humanities/Soc. Sci. Elective*	3	Free Electives	6
Free Elective	3		18
	18		

Minimum Hours Required for Graduation ... 138

*Humanities and Social Science courses to be selected from the approved School of Engineering list.

**CE Approved Electives (Engineering Design)—(Select two pair):

A

CE 406 Transportation Systems Engineering	and
CE 426 Steel Design	and
CE 443 Seepage, Earth Embank. & Ret. Str.	and
CE 484 Water Supp. & Waste Water System	and

B

CE 400 Transportation Engineering Project
CE 420 Structural Engineering Project
CE 440 Geotechnical Engineering Project
CE 480 Water Resources Engineering Project

***Approved Elective (Engineering Science)—Select one: ECE 331, MAE 301, MAT 400, or MAT 450.

****Select from approved departmental list in consultation with advisor.

CONSTRUCTION OPTION CURRICULUM

See the freshman year School of Engineering.

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CE 202 Computer Applications in C.E.	3	CE 215 Engr. Mech.—Dynamics	2
CE 214 Engineering Mechanics—Statics	3	CE 313 Mechanics of Solids	3
IE 311 Engr. Economic Analysis	3	MA 301 Applied Diff. Equations I	3
MA 202 Analytic Geometry & Calc. III	4	MAT 200 Mech. Prop. of Struc. Matls.	2
PY 208 General Physics	4	MEA 120/110 Physical Geology	3
Physical Education Elective	1	Humanities/Soc. Sci. Elective*	3
	18	Physical Education Elective	1
			17

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CE 301 Engineering Surveying	3	CE 305 Traffic Engineering or	
CE 324 Structural Behavior Measurements	1	CE 383 Hydrology & Urban Water Systems	3
CE 325 Structural Analysis	3	CE 327 Reinforced Concrete Design	3
CE 332 Materials of Construction	3	CE 342 Engr. Behav. of Soils & Foundations	4
CE 382 Hydraulics	4	CE 365 Construction Methods & Mgmt.	3
Humanities/Soc. Sci. Elective*	3	CE 375 Civil Engineering Systems	3
	17		16

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CE 426 Steel Design	3	CE 460 Construction Engr. Project	3
CE 463 Cost Analysis & Control	3	CE 466 Building Construction	3
CE 464 Legal Aspects of Contracting	3	Humanities/Soc. Sci. Elective*	6
Approved Elective (Engr. Sci.)**	3	Free Electives	6
Humanities/Soc. Sci. Elective*	3		18
Free Elective	3		
	18		

Minimum Hours Required for Graduation ... 138

*Humanities or Social Science courses to be selected from the approved School of Engineering list.

**Approved Electives (Engineering Science)—(select one): ECE 331, MAE 301, MAT 400, or MAT 450.

CONSTRUCTION MANAGEMENT CURRICULUM

See the freshmen year School of Engineering.

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CE 202 Computer Application in C. E.	3	CE 201 Elements of Plane Surveying	3
CE 214 Engineering Mechanics—Statics	3	CE 215 Engineering Mechanics—Dynamics	3
EB 201 Economics I	3	CE 313 Mechanics of Solids	3
MA 202 Analytic Geometry & Calc. III	4	EB 301 Production & Prices	3
PY 208 General Physics	4	MA 301 Applied Differential Equations I	3
Physical Education Elective	1	Physical Education Elective	1
	18		16

SUMMER INTERNSHIP: OFF-CAMPUS*

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ACC 280 Managerial Accounting	3	CE 327 Reinforced Concrete Design	3
CE 325 Structural Analysis	3	CE 463 Cost Analysis & Control	3
CE 333 Prop. of Construction Materials	3	DN 253 Basic Environmental Systems	3
CE 365 Construction Methods & Mgmt.	3	IE 311 Engr. Economic Analysis	3
ENG 321 Communication of Technical Info	3	Humanities Elective**	3
Free Elective	3	Free Elective	3
	18		18

SUMMER INTERNSHIP: OFF-CAMPUS*

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CE 466 Building Construction	3	CE 460 Construction Engineering Project	3
EB 302 Intermediate Macroeconomics	3	CE 464 Legal Aspects of Contracting	3
EB 326 Personnel Management	3	Approved Electives in Construction***	6
Approved Electives in Construction***	6	Approved Electives in Economics****	3
Free Elective	3	Humanities Elective**	3
	18		18

Minimum Hours Required for Graduation ... 139

*In addition to the course work, the graduation requirement also includes a minimum of ten weeks of summer cooperative internship in the sophomore and junior years. The internships are spent off campus within the construction industry. Prior approval of internship activities must be obtained from the program director.

**Three humanities, including one in the freshman year, to be selected from the approved School of Engineering list.

***From the approved list, the student will select four courses in one of the three following areas of concentration: general construction, mechanical construction, or electrical construction.

****Select one course from EB 404, EB 410, or EB 420.

POST-BACCALAUREATE STUDY IN CIVIL ENGINEERING

If a student is interested in more intense specialization in a particular area of civil engineering, advanced level training is available leading to the Professional Degree in Civil Engineering, the Master of Science in Civil Engineering, the Master of Civil Engineering, or the Doctor of Philosophy. Specialization areas include coastal and ocean engineering, construction engineering and management, construction materials, environmental and water resources engineering, geotechnical engineering, mechanics and structural engineering and transportation engineering. With judicial choice of electives, a student may also prepare for additional study in law, business administration, business management and city and regional planning. The Department of Economics and Business offers a Master of Science in Management with several technical options including Civil Engineering—Construction.

ELECTRICAL AND COMPUTER ENGINEERING

Daniels Hall (Room 232)

Professor Nino A. Masnari, Head of the Department

Associate Professor W. T. Easter, Associate Head of the Department

Professor T. H. Glisson, Graduate Administrator

Lecturer J. H. Larson, Coordinator of Advising

Professors: D. P. Agrawal, W. E. Alexander, S. M. Bedair, D. Beilman, W. Chou, J. J. Grainger, J. R. Hauser, M. A. Littlejohn, N. F. J. Matthews, L. K. Monteith, H. T. Nagle, Jr., J. B. O'Neal, Jr., C. M. Osburn, A. Reisman, D. R. Rhodes, H. J. Trussell, A. Vander Lugt, J. J. Wortman; *Adjunct Professors:* Homer Brown, R. K. Cavin III, E. Christian, W. A. Flood, W. L. Glomb, W. C. Holtin, H. R. Robl, J. R. Suttle; *Professors Emeriti:* W. J. Barclay, A. R. Eckles, A. J. Goetze, G. B. Hoadley, W. D. Stevenson, Jr., F. J. Tischer; *Associate Professors:* G. F. Bland, S. Chitsaz, S. E. Diehl, J. F. Kauffman, R. M. Kolbas, A. A. Nilsson, S. A. Rajala, W. E. Snyder, R. J. Trew, M. W. White; *Adjunct Associate Professors:* F. Brglez, J. A. Hutchby, J. R. Jones, S. H. Lee, J. W. Mink, M. A. Strosio; *Associate Professors Emeriti:* N. R. Bell, E. G. Manning, W. C. Peterson, W. P. Seagraves, E. W. Winkler; *Assistant Professors:* S. T. Alexander, E. F. Gehringer, R. S. Gyuresik, W. T. Liu, D. L. Lubkeman, R. C. Luo, R. Mehrotra, T. K. Miller, III, J. J. Paulos, G. A. Ruggles, M. B. Steer; *Adjunct Assistant Professors:* J. D. Charlton, M. Lorenzetti, K. Wasson; *Assistant Professor Emeritus:* L. R. Herman; *Lecturers:* P. T. Hutchison, R. T. Kuehn, P. Rastgoufard; *Adjunct Instructors:* J. V. Aanstoos, H. J. Brown; *Research Associates:* G. L. Bilbro, S. T. Edwards, T. Humphreys, J. B. Posthill, P. M. Synder; *Research Assistants:* C. B. Cook, N. Karam, J. O'Sullivan, G. Hatem; *Associate Members of the Department:* S. Khorram (Forestry), G. Lucovsky (Physics), H. Martin (NCA&TSU), E. Nicollan (UNC-C).

The profession of electrical engineering, of which computer engineering is an integral and rapidly growing part, is concerned with the design and implementation of systems based on natural electrical and magnetic phenomena. In contemporary technological society, electrical means are frequently used to communicate information, perform mathematical operations, control equipment and systems, and develop mechanical forces and heat. Usually two or more of these functions figure in the design of practical systems such as telephone, radio, television, computers, industrial robots, telemetering systems, electric machinery and systems for generation and transmission of electric power. Computer engineering deals specifically with those systems which utilize digital and computer techniques to accomplish particular objectives. This profession has arisen largely out of the advent of low-cost microprocessors and solid-state memories which have dramatically improved the feasibility of incorporating computers even in home appliances. To work effectively in this new technology, the computer engineer must fully understand both hardware and software techniques and be able to trade off one for the other to produce an optimum system.

The Electrical Engineering Program, which is accredited by the Accreditation Board for Engineering and Technology (ABET), leads to the degree Bachelor of Science in Electrical Engineering. The new Computer Engineering Program, in accordance with ABET procedures, will be presented for accreditation following graduation of the first students in 1986-87. The program leads to the degree Bachelor of Science in Computer Engineering.

SCHOLARSHIPS AND AWARDS

Superior academic performance is recognized within this department in three ways: election of students to membership in the electrical engineering honor society, Eta Kappa Nu; awarding of merit scholarships; and presentation of awards to outstanding seniors. The department has four endowed merit scholarships which are usually awarded to juniors or seniors: L. A. Mahler, Frank T. Pankotay, E. Chester Seewald, and William D. Stevenson, Jr., the latter of which is for students studying electric power systems. In addition, the William M. Cates Scholarship Program provides multiple scholarships for students having documented financial need and high academic performance. These are awarded to juniors, with provision for continuation in the senior year. The department also from time to time has scholarships provided by industrial firms. Merit is generally the primary requirement for these awards, but other characteristics, such as leadership, may also be specified.

FACILITIES

Many courses are accompanied by coordinated work in laboratory, and facilities are provided for experimental study of electric and electronic circuits, digital systems, micro-processors, computers, electric machinery, VLSI design and fabrication, robotics, communication systems, electromagnetic waves, and microwave systems.

Major research facilities in the department, which also support the teaching program, include the Center for Communications and Signal Processing, Electric Power Research Center, complete VLSI design facilities, a VAX 11/780-based system for computer graphics and image processing, a Puma industrial robot, optical characterization facilities for materials and devices and solid-state fabrication laboratories with facilities for vapor-phase epitaxy, molecular-beam epitaxy and ion implantation. In addition, an IC fabrication laboratory, which is operated jointly by NCSU and the Microelectronics Center of North Carolina, is located in Daniels Hall.

CORE COURSES

The electrical and computer engineering curricula share a core which comprises a substantial portion of the first three years. Because the technology is changing rapidly, strong emphasis is placed on fundamentals to meet both near- and long-term needs of students who will enter these professions. A comprehensive foundation in mathematics and physical sciences in the freshman year is followed in the sophomore year by a thorough treatment of electric circuit theory and principles of digital systems. The core in the junior year continues the study of circuits with emphasis on solution of problems using numerical computer techniques; introduces the concepts of computer organization; and includes electronics, linear systems and electromagnetic field theory.

Emphasis on engineering design starts in the sophomore year in both curricula and increases as the student proceeds through the program. Several senior electives are essentially design projects. Extensive computer facilities support the analysis and design activities, and CRT terminals interconnected with TUCC are located in Daniels Hall. Departmental computer systems include a Harris 800 minicomputer, a Hewlett Packard 64000 software development system, a Digital Equipment VAX 11/750 hosting a network of personal computers, and numerous DEC MicroVAX workstations.

ELECTRICAL ENGINEERING CURRICULUM

For students in the electrical engineering curriculum, the foundation is completed with a study of power systems. In the senior year, the student may choose specialization or breadth with appropriate selections for five senior departmental electives. Through the broad expertise of faculty, courses are offered in electronics and communication systems, telecommunication systems, digital systems and computers, solid-state devices and microelectronics, VLSI systems design, electric power systems, computer control of motors, robotics, electromagnetics and microwaves. Because electrical engineers interact with a wide variety of engineering disciplines, this curriculum also includes study of mechanics, thermodynamics and other non-electrical areas selected by the student.

See the freshman year of the School of Engineering.

SOPHOMORE YEAR			
Fall Semester	Credits	Spring Semester	Credits
CSC 101 Intro. to Programming	3	CE 213 Intro. to Mechanics	3
ECE 211 Electric Circuits I ^a	3	ECE 212 Fundamentals of Logic Design ^b	3
ECE 213 Electric Circuits Lab	1	ECE 214 Fund. Logic Design Lab	1
MA 202S Anly. Geometry & Calc. III	4	MA 301S Differential Equations	3
PY 208 General Physics II	4	Humanities/Soc. Sci. Elective ¹	3
Humanities/Soc. Sci. Elective ¹	3	Free Elective	3
Physical Education Elective	1	Physical Education Elective	1
	19		17

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ECE 302 Elec. Circ. II with Num. Appl.	3	ECE 301 Linear Systems	3
ECE 303 Electromagnetic Fields	3	ECE 305 Electric Power Systems	3
ECE 314 Electronic Circuits	3	ECE 318 Computer Org. & Microprocessors	3
ENG 321 Communication of Tech. Infor.	3	MAE 301 Engr. Thermodynamics I	3
Approved Engr. Sci. Elective ³	3	Approved Engr. Sci. Elective ³	3
Humanities/Soc. Sci. Elective ¹	3	Free Elective	3
	18		18

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ECE 4—Approved Dept. Elective ⁴	(3) 9	ECE 4—Approved Dept. Electives ⁴	(2) 6
Approved Technical Elective ²	3	Approved Technical Elective ²	3
Humanities/Soc. Sci. Elective ¹	3	Humanities/Soc. Sci. Elective ¹	3
	15	Free Elective	3
			15

Minimum Hours Required for Graduation ... 135⁶

¹The courses in the humanities and social sciences are to follow the standard Engineering School plan. The requirements and list of appropriate courses are available in the ECE office.

²The technical elective is to be chosen from an approved list available in the ECE office.

³The engineering science (non-ECE) electives are to be chosen from an approved list available in ECE office.

⁴The ECE departmental electives are to be chosen from an approved list available in the ECE office.

⁵The following courses must be completed with grades of C or better to qualify as prerequisites for succeeding courses: ECE 211 and ECE 212.

⁶In addition to the university graduation requirements, the department requires a GPA of 2.0 or higher on all courses bearing the ECE designation. Graduation requirements also include attendance at two professional technical society meetings during the junior and senior years. The student is responsible for providing documentation showing satisfaction of these requirements.

COMPUTER ENGINEERING CURRICULUM

The foundation is completed in the computer engineering curriculum in the junior year with further work in digital systems and logic design. Five departmental electives in the senior year permit specialization in design of computers and computer systems through choices of appropriate courses along with others in computer analysis techniques and computer-aided design. Building on the required introductory computer programming course, the student may use three engineering science electives to take further work in computer science in order to build a sound software capability.

See the freshman year of the School of Engineering.

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credit</i>	<i>Spring Semester</i>	<i>Credits</i>
CSC 101 Intro. to Programming	3	CE 213 Intro. to Mechanics	3
ECE 212 Fundamentals of Logic Design ⁵	3	ECE 211 Electric Circuits I ⁶	3
ECE 214 Fund. Logic Design Lab.	1	ECE 213 Electric Circuits Lab.	1
MA 202S Anly. Geom. & Calc. III	4	MA 301S Differential Equations	3
PY 208 General Physics II	4	Humanities/Soc. Sci. Elective ¹	3
Humanities/Soc. Sci. Elective ¹	3	Free Elective	3
Physical Education Elective	1	Physical Education Elective	1
	19		17

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ECE 301 Linear Systems	3	ECE 302 Elec. Circ. II with Num. Appl.	3
ECE 318 Computer Organiz. & Microproc.	3	ECE 303 Electromagnetic Fields	3
ECE 342 Design of Complex Digital Systems	3	ECE 314 Electronic Circuits	3
ENG 321 Communication of Tech. Infor.	3	ST 372 Intro. Stat. Inference & Regress. ⁷	3
Approved Engr. Sci. Elective ³	3	Approved Engr. Sci. Elective ³	3
Humanities/Soc. Sci. Elective ¹	3	Free Elective	3
	18		18

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ECE 4—Approved Dept. Electives ⁴	(3)/9	ECE 4—Approved Dept. Elective ⁴	(2)/6
Approved Engr. Sci. Elective ⁵	3	Approved Technical Elective	3
Humanities/Soc. Sci. Elective ¹	3	Humanities and Social Sciences ¹	3
	15	Free Elective	3
			15

Minimum Hours Required for Graduation ...135⁶

¹The courses in the humanities and social sciences are to follow the standard Engineering School plan. The requirements and list of appropriate courses are available in the ECE office.

²The technical elective is to be chosen from an approved list available in the ECE office.

³The engineering science (non-ECE) electives are to be chosen from an approved list available in the ECE office.

⁴The ECE departmental electives are to be chosen from an approved list available in the ECE office.

⁵The following courses must be completed with grades of C or better to qualify as prerequisites for succeeding courses: ECE 211 and ECE 212.

⁶In addition to the university graduation requirements, a GPA of 2.0 or higher must be earned on all courses bearing the ECE designation. Graduation requirements also include attendance at two professional technical society meetings during the junior and senior years. The student is responsible for providing documentation showing satisfaction of these requirements.

⁷MA 301S serves as a prerequisite for ST 372.

COMPUTER STUDIES PROGRAM

Daniels Hall (Room 318)

Professor W. Chou, Director

Professor D. F. McAllister, Associate Director

Professors: D. P. Agrawal, W. E. Alexander, R. E. Funderlic, W. S. Galler, H. J. Gold, D. C. Martin, H. T. Nagle, Jr., J. B. O'Neal, R. J. Plemmons, R. S. Sowell, W. J. Stewart, R. E. Stinner, K. C. Tai, A. L. Tharp; *Adjunct Professor:* J. R. Suttle; *Professor Emeritus:* P. E. Lewis; *Associate Professors:* E. W. Davis, R. J. Fornaro, T. L. Honeycutt, D. M. Latch, H. D. Levin, A. A. Nilsson, H. G. Perros, S. A. Rajala, W. E. Robbins, R. D. Rodman, C. D. Savage, J. C. Smith, W. E. Snyder, H. J. Trussell; *Assistant Professors:* S. T. Alexander, N. M. Bengtson, N. A. Blue, G. Y. Fletcher, E. F. Gehringer, W. T. Liu, R. C. Luo, J. Mauney, R. Mehrotra, T. K. Miller III, W. J. Rasdorf, M. F. Stallman, M. A. V. Vouk, N. F. William.

The Computer Studies Program is an interdisciplinary graduate program which is administratively supported by the Departments of Computer Science and Electrical and Computer Engineering with participation by faculty members primarily from Computer Science, Electrical and Computer Engineering and Operations Research.

The program integrates the computer software-oriented curriculum of the Department of Computer Science and the computer hardware-oriented curriculum of the Department of Electrical and Computer Engineering into a single curriculum.

The program offers Master of Science and Master of Computer Studies degrees. Students interested in a Ph.D. degree may pursue the degree through the Department of Electrical and Computer Engineering and may choose either the computer engineering or computer science option. Students may also obtain the degree via a joint Ph.D. degree arrangement with Operations Research, Mathematics, Statistics, or Biomathematics. In this case, the degree is formally granted through the respective department/program.

ENGINEERING

Page Hall (Room 116)

The B. S. in Engineering degree offers an individualized academic program for those exceptional students who have academic and career goals that can not be accommodated by the other engineering degree programs. Before being admitted into the program, students must complete the freshmen year, have at least a 2.5 grade point average, have completed the course requirement for admission into an engineering degree program and have a plan of study approved by the student's advisory committee and the dean. For information about the program, contact the Director of Extradepartmental Degree Programs.

INDUSTRIAL ENGINEERING

Riddick Engineering Laboratories (Room 334)

Professor T. J. Hodgson, Head of Department

Lecturer C. L. Smith, Assistant Department Head

Professors: M. A. Ayoub, R. H. Bernhard, J. R. Canada, S. E. Elmaghraby, R. G. Pearson, A. L. Prak, W. A. Smith, Jr.; *Professors Emeriti:* C. A. Anderson, R. G. Carson, Jr., J. J. Harder, R. W. Llewellyn; *Associate Professors:* M. G. Joost, H. L. W. Nuttle, P. O'Grady, R. E. Young; *Assistant Professors:* H. Bao, E. L. Fisher, R. E. King, C. B. Oldham, J. E. Richards, E. T. Sanii; *Visiting Assistant Professor:* J. Trevino; *Lecturers:* J. A. Ekwall, S. G. Isley, E. Peebles; *Professor in Charge of FMM:* C. T. Culbreth; *Furniture Extension Specialist and Lecturer:* E. L. Clark, R. E. Fulenwider.

Industrial engineers design, improve and install integrated systems of people, materials, equipment, and information. Using specialized knowledge of engineering analysis and design techniques, and skills in the mathematical, physical and social sciences, they can specify, predict and evaluate the results of these systems. Industrial engineers act as management advisors by monitoring every phase of production within a company. Organizations as diverse as hospitals, department stores, manufacturing companies, insurance businesses, or government office use industrial engineers to develop operations that increase productivity and use their resources effectively.

INDUSTRIAL ENGINEERING CURRICULUM

The curriculum combines common technical engineering courses with specialized courses in the major areas of industrial engineering—design of human and machine systems, design of management control systems, and improvement of manufacturing operations. The course offerings stress mathematical and statistical techniques of industrial systems analysis; quantitative methodologies of operations research; computers as a tool for problem solving and simulation; economic considerations of alternatives; control of product or service quality and quantity; specifications of the manufacturing process including the equipment and tooling; and the utilization of safety and human factors engineering principles.

Industrial engineering's undergraduate program leads to a Bachelor of Science degree in industrial engineering which is accredited by the Accreditation Board for Engineering and Technology (ABET). See listing of graduate degrees offered. The department also offers a Bachelor of Science in furniture manufacturing and management.

See the freshman year of the School of Engineering.

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CSC 111 Intro. to FORTRAN Programming	2	ECE 331 Principles of Electrical Engr.	3
IE 100 Introduction to IE	1	IE 307 Process Control Computing	3
MA 202 Analytic Geometry & Calc. III	4	IE 311 Engineering Econ. Analysis	3
MAT 201 Struct. & Prop. of Engr. Materials	3	MA 303 Linear Analysis	3
PY 208 General Physics	4	ST 371 Intro. to Prob. & Distr. Theory	3
Humanities and Social Sciences (Lit.)	3	Physical Education Elective	1
Physical Education Elective	1		16
	18		

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ENG 321 Comm. Techn. Information	3	IE 352 Work Analysis & Design	3
IE 351 Manufacturing Engineering	3	IE 401 Stochastic Models in IE	3
IE 361 Deterministic Models in IE	3	IE 443 Quality Control	3
MAE 206 Engineering Statics	3	IE 453 Ergonomics	3
ST 372 Intro. to Stat. Infer. & Regression	3	Humanities and Social Science	3
Humanities & Social Science	3	Free Elective	3
	18		18

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ACC 280 Managerial Accounting	3	IE 498 Sr Project/Design Course	3
IE 308 Control of Prod. & Service Sys.	3	Engineering Science Elective	6
IE 441 Introduction to Simulation	3	Humanities & Social Science	3
IE 453 Facilities Design	3	Free Elective	3
Humanities & Social Science	3		15
Free Elective	3		
	18	Minimum Hours Required for Graduation ...	136

MINOR IN INDUSTRIAL ENGINEERING

To obtain a minor in industrial engineering a student must complete a minimum of fifteen hours from courses given on the departmental list. Students wishing to complete the minor requirements must make application to the Department of Industrial Engineering and must meet the same academic criteria used for transfer applications.

FURNITURE MANUFACTURING AND MANAGEMENT

Riddick Engineering Laboratories (Room 341)

Assistant Professor C. T. Culbreth, In Charge

James T. Ryan Professor A. L. Prak; Lecturer: J. A. Ekwali; Furniture Extension Specialist: E. L. Clark.

The Furniture Manufacturing and Management program at NCSU is the only one of its kind in the United States. The furniture industry is concentrated in the Southeast with over 50 percent of the national output of wooden household furniture being produced within a 200 mile radius of High Point, North Carolina. The industry is in a period of rapid change due to the introduction of sophisticated computer-based manufacturing methods and control systems.

Attracting students on an international basis, the FMM program offers a manufacturing engineering education focusing on the materials, products, and processes of the furniture industry. The need for professionals having an engineering education will increase as the industry continues to automate its operations. Graduates will find challenging careers as engineers and managers in this important industry.

The faculty has industrial experience and maintains close contact with the furniture industry through involvement with the American Furniture Manufacturers Association and by conducting applied research and extension activities. The industry assists students by providing jobs in the cooperative education program and by making scholarship aid available through the Furniture Foundation, Inc.

CURRICULUM IN FURNITURE MANUFACTURING AND MANAGEMENT

The of Bachelor of Science degree in furniture manufacturing and management prepares graduates for engineering and managerial positions in the furniture industry.

The curriculum stresses the application of engineering principles and computer-based controls to furniture manufacturing. Students have the opportunity to work with Computer Aided Design (CAD) systems and computer numerically controlled (CNC) machines. Related subjects, such as management, accounting, and economic analysis address the business aspects of modern furniture production.

In addition to academic course work, a minimum of six weeks of continuous, gainful employment in a furniture manufacturing plant is required. Usually, such employment occurs between the junior and senior years.

See the freshman year School of Engineering.

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CSC 111 Intro. to FORTRAN Programming	2	ACC 280 Managerial Accounting	3
GC 240 Furniture Graphics	3	IE 241 Furn. Mfg. Processes I	3
IE 100F Intro. to Indust. Engineering	1	IE 307 Process Control Computing	3
PY 208 General Physics	4	ST 361 Intro. to Stat. for Engrs.	3
SP 110 Public Speaking	3	WPS 201 Elements of Wood	3
Humanities/Soc. Sci. Elective	3	Physical Education Elective	1
Physical Education Elective	1		16
	17		

SUMMER

WPS 205 Wood Products Practicum	5
---------------------------------------	---

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ENG 321 Communication of Tech. Info.	3	IE 311 Engineering Economic Analysis	3
IE 340 Furn. Mfg. Processes II	4	IE 341 Furn. Plant Layout & Design	3
IE 345 Principles of Upholstery	2	Humanities/Soc. Sci. Elective	6
IE 352 Work Analysis & Design	3	Technical Elective	2
Humanities/Soc. Sci. Elective	3	Free Elective	3
	15		17

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
EB 326 Human Resource Management	3	IE 440 Furn. Management Analysis	3
IE 371 Furn. Qual. Prod. Cont.	4	IE 472 Quant. Meth. Furn. Manuf.	4
Technical Elective	4	Humanities/Soc. Sci. Elective	3
Free Elective	3	Technical Elective	2
	14	Free Elective	3
			15

Minimum Hours Required for Graduation .. 132*

*Also required for graduation: 6 weeks of industrial employment.

MATERIALS SCIENCE AND ENGINEERING

Riddick Engineering Laboratories (Room 229)

Professor John J. Hren, Head of the Department

Professor H. Palmour III, Associate Department Head

Professors: J. R. Beeler, Jr., R. B. Benson, Jr., H. Conrad, R. F. Davis, A. A. Fahmy, C. C. Koch, K. L. Moazed, J. N. Narayan, G. O. Razgonyi, R. O. Scattergood, H. H. Stadelmaier; *Adjunct Professors:* Y. Chen, C. R. Manning, Jr., G. Mayer, F. Rothwarf, J. Routbort; *Professors Emeriti:* W. W. Austin, J. K. Magor, R. F. Stoops; *Associate Professor:* K. L. Murty (joint with Nuclear Engineering), P. E. Russell; *Adjunct Associate Professor:* J. C. Hurt; *Assistant Professors:* C. M. Balik, N. El-Masry, R. L. Porter; *Adjunct Assistant Professor:* P. A. Parrish; *Research Associates:* T. Hare, J. Posthill; *Research Assistant:* M. J. Paisley; *Associate Members of the Faculty:* K. J. Bachman (Chemistry), J. A. Bailey (Mechanical and Aerospace Engineering), K. S. Havner, Y. Horie (Civil Engineering), G. Lucovsky (Physics).

The Department of Materials Science and Engineering offers programs to qualify graduates for positions in industry, educational institutions, and governmental agencies involving design, development, selection, and processing of engineering materials. Typical of the industries served by graduates in materials engineering are: aerospace, chemical, electrical, electronics, construction, manufacturing, materials processing, nuclear, and transportation.

OPPORTUNITIES

The continuing industrial and technological growth of the Southeast in general and of the State of North Carolina in particular has been marked by a particularly strong demand for materials scientists and engineers. New materials and novel processing and/or fabrication methods are required by a large fraction of modern technology. Therefore, professional training in materials science and engineering provides career opportunities in a wide variety of industries from those which produce and/or use metals and glass or ceramics to microelectronic devices and plastics. These opportunities include careers in research and development of new materials and processes for producing them, failure analysis, product design and reliability, and technical management.

CURRICULUM IN MATERIALS SCIENCE AND ENGINEERING

The materials engineer must be able to deal with a wide range of phenomena that occur in metals, ceramics and polymers. The undergraduate curriculum is designed as a balanced program, treating the scientific and engineering principles applicable to all classes of materials, along with particular engineering and design concepts unique to each class of material. Further emphasis in a specialty area is provided by choosing from a recommended set of technical electives (9 credits) in ceramics, metals, polymers or microelectronic materials. The remaining required courses are distributed among mathematics, physical sciences, and the humanities and social sciences. The material science and engineering program, which is accredited by the Accreditation Board for Engineering and Technology (ABET), leads to the degree Bachelor of Science in Materials Science and Engineering.

A fifth year professional program is available for advanced study and further specialization.

See the freshman year School of Engineering.

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
MA 201 Str. & Prop. of Eng. Mat'ls.	3	CSC 111 Intro. to Comp. Sci.	2
MA 202 Anly. Geometry & Calc. III	4	ECE 331 Electrical Engr.	3
MAE 206 Engr. Statics	3	MA 301 Differential Equation	3
MAT 210 Exper. Mat. Engr.	1	MAT 301 Equil. & Rate Processes	3
PY 208 General Physics	4	Humanities/Soc. Sci. Electives	6
Physical Education Elective	1	Physical Education Elective	1
	16		18

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
MAE 314 Solid Mechanics	3	MAT 321 Phase Transf. & Diff.	3
MAT 324 Polymer Char. Lab	1	MAT 331 Prin. Mat'ls. II	3
MAT 325 Intro. Polymer Mat.	4	MAT 434 Ceramic Engr. Lab.	1
MAT 330 Prin. Mat'ls. I	3	MAT 435 Physical Ceramics I	3
MAT 410 Comp. Appl. Met. Engr.	3	MAT 450 Mech. Prop. Mat.	3
Humanities/Soc. Sci. Elective	3	Free Elective	3
	17		16

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
MAT 332 Prin. Mat'ls. III	3	MAT 423 Mat. Factors in Design	3
MAT 430 Phys. Met. Lab.	1	MAT 491 Mat. Engr. Seminar	1
MAT 431 Physical Metal. I	4	Humanities/Soc. Sci. Elective	3
Humanities/Soc. Sci. Elective	3	Technical Elective	6
Technical Elective	3	Free Elective	3
Free Elective	3		16
	17		

Minimum Hours Required for Graduation ... 134

SPECIALTY AREAS

Nine credit hours of technical electives are required. If a specialty area is chosen, one of the following sequences of technical electives is recommended. Other technical elective sequences may be selected with departmental approval.

Ceramics

MAT 311—Ceramic Processing I
MAT 312—Ceramic Processing II
MAT 436—Physical Ceramics II

Metals

MAT 432—Physical Metallurgy II
MAT 440—Foundry Metallurgy
MAT 441—Welding Metallurgy

*Polymeric Materials**

T 402—Introduction to Theory and Practice of Fiber Formation
TC 461—Introduction to Fiber-Forming Polymers
TES 460—Physical Properties of Textile Fibers

*Students selecting the polymeric materials specialty area must take CH 220. This course is acceptable as the prerequisite for TC 461.

Microelectronic Materials

ECE 439—Integrated Circuit Technology and Fabrication
ECE 441—Introduction to Solid-State Devices
MAT 460—Microelectronic Materials Technology

MECHANICAL AND AEROSPACE ENGINEERING

Broughton Hall (Room 3211)

Professor J. A. Bailey, Head of Department

Professor J. A. Edwards, Director of Mechanical Engineering Program

Professor J. N. Perkins, Director of Aerospace Engineering Program

Professor J. C. Mulligan, Graduate Administrator

Lecturer A. S. Boyers, Undergraduate Administrator

Professors: E. M. Afify, J. A. Bailey, J. A. Edwards, F. R. DeJarnette, T. A. Dow, W. C. Griffith, F. J. Hale, F. D. Hart, H. A. Hassan, T. H. Hodgson, E. G. Humphries, J. C. Mulligan, M. N. Ozisik, J. N. Perkins, L. H. Royster, F. O. Smetana, F. Y. Sorrell, C. F. Zorowski; *Adjunct Professors:* R. L. Bradow, C. T. Crowe, R. E. Fulton, G. Horvay, E. R. McClure, E. A. Saibel, R. A. Whisnant; *Visiting Professors:* M. M. Fikry, S. A. Jurovics; *Professors Emeriti:* R. A. Burton, M. H. Clayton, B. H. Garcia, Jr., J. S. Doolittle, J. K. Whitfield, J. Woodburn; *Associate Professors:* M. A. Boles, M. D. Bryant, A. C. Eberhardt, R. R. Johnson, R. F. Keltie, C. Kleinstreuer, J. W. Leach, C. J. Maday, D. S. McRae, W. F. Reiter, J. S. Strenkowski, S. Torquato; *Associate Professor and Extension Specialist:* H. M. Eckerlin; *Adjunct Associate Professors:* R. N. Armstrong, R. W. Barnwell, J. F. Campbell, P. C. Corson, D. L. Dwoyer, R. M. Hall, D. L. Margolis, D. W. Moon, D. M. Rao, M. J. Ruiz, H. Singh, R. E. Singleton, J. S. Stewart; *Assistant Professors:* J. W. David, J. Eischen, E. Klang, L. M. Silverberg, C. Spiekerman; *Adjunct Assistant Professors:* D. P. Colvin, J. U. Crowder, J. A. Daggerhart, P. A. Gnoffo, A. L. Patra, T. W. Sigmon; *Visiting Assistant Professors:* J. H. Hebrank, D. P. Hoy; *Lecturers:* G. O. Batton, A. S. Boyers, R. J. Leuba, R. J. Vess; *Visiting Instructor:* T. H. Brown; *Adjunct Instructors:* H. G. Hoomani, D. W. Lindley.

Mechanical engineering comprises a wide range of activities including research; design and development; testing and experimentation; production implementation; manufacturing; operations; engineering sales and service; and management of engineering systems, subsystems and components. The diverse areas to which mechanical engineers contribute include transportation, power generation, energy conversion, environmental control, pollution abatement, manufacturing, and noise control. A recent trend in one phase of mechanical engineering has been increased interest in the areas of robotics, precision engineering, and automated manufacturing systems.

The employment demand for graduates in mechanical engineering typically exceeds the supply and is among the highest of the various engineering departments.

Aerospace engineering has grown out of the challenge of the design, construction, and operation of vehicles that move or travel above the earth's surface. These vehicles range from ground-effect machines and helicopters to aircraft, rockets, and spacecraft. The

design of these vehicles is difficult not only because they must be light weight but also because they must operate reliably and efficiently in a harsh environment. Moreover, the design requirements for spacecraft and high performance transport aircraft also apply to the next generation of ground transportation systems such as high speed trains, over-water transport, and automated motor vehicles.

Most graduates in aerospace engineering prefer to seek employment in the aerospace industry, however, they are broadly qualified for a variety of kinds of practice. Every major class of thermal and mechanical system is included in aerospace vehicles. The aerospace industry is one of the largest employers of engineers in the United States. Career and employment opportunities are available in the areas of aerodynamics, propulsion, structures, structural dynamics, and stability and control in both commercial and private aviation, and in related aerospace industries.

FACILITIES

Laboratories include research facilities in acoustics, automotive engine pollution and performance, computer-aided-design and computer graphics, the effect of shock loading on materials, machine tool wear and mechanics, applied energy systems including a complete solar house, precision engineering, and boundary layers on airfoils.

Undergraduate laboratories exist for the following courses and activities: mechanical engineering measurements, performance evaluation of mechanical engineering systems, senior projects in machine and system design, senior projects in aerospace vehicle design, and subsonic and supersonic wind tunnel testing and data analysis. In addition there are graduate laboratories in experimental stress analysis and photoelasticity. Further, the department has a complete machine shop and electronics and instrumentation shop and related technicians.

OPPORTUNITIES

The flexibility and breadth of the mechanical engineering curriculum culminates in a broad range of employment opportunities in machinery and power related applications the world over. Mechanical engineers work at the heart of development of computer controlled devices, vehicles and production machinery. They are well qualified for employment in production or product planning and for industrial management. Many go into research and development after graduate study.

The aerospace engineers prefer the aerospace industry, but are broadly qualified for a variety of kinds of practice. Every major class of thermal and mechanical system is included in aerospace vehicles. The aerospace industry is one of the largest employers of engineers in the United States. Career and employment opportunities are available in the areas of aerodynamics, propulsion, structures and stability and control in both commercial and private aviation and in related aerospace industries. stability and control in both commercial and private aviation and in related aerospace industries.

CURRICULA

Because of the close relationship between mechanical and aerospace engineering, both curricula are administered by one department. There is cooperation between the two disciplines in which responsibility for subject areas such as thermodynamics, heat and mass transfer, vibrations, acoustics, fluid mechanics, propulsion and control theory is shared.

Each program is designed to provide the student with an understanding of both the science on which the discipline is founded and the applied science and technology which characterizes its specific character. In addition the programs provide the student with an opportunity to develop the skills for applying his or her acquired knowledge. The aerospace engineering and the mechanical engineering programs, which are accredited by the Accreditation Board for Engineering and Technology (ABET), lead to the degrees Bachelor of Science in Aerospace Engineering, and Bachelor of Science in Mechanical Engineering, respectively. Graduate degrees are also offered (see listing of graduate degrees offered and consult the Graduate Catalog).

MECHANICAL ENGINEERING CURRICULUM

See the freshman year School of Engineering.

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>
CSC 111 Intro. to FORTRAN Programming	2
MA 202 Analytic Geometry & Calc. III	4
MAE 206 Engr. Statics	3
PY 208 General Physics	4
Humanities, Social Sci.* or Free Elective	3
Physical Education Elective	1
	<hr/> 17

<i>Spring Semester</i>	<i>Credits</i>
MA 301 Appl. Diff. Equations	3
MAE 208 Engr. Dynamics**	3
MAE 314 Solid Mechanics	3
MAT 201 Struct. & Prop. of Engr. Matr.	3
Humanities, Social Sci.* or Free Elective	6
Physical Education Elective	1
	<hr/> 19

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>
EE 331 Prin. of Elec. Engr.	3
MAE 301 Engr. Thermo I***	3
MAE 305 Mech. Engr. Lab I	1
MAE 315 Dynamics of Machines	3
MAE 316 Strength of Mech. Comp.	3
Humanities, Social Sci.* or Free Elective	3
	<hr/> 16

<i>Spring Semester</i>	<i>Credits</i>
EE 332 Prin. of Elec. Engr. or	
MAE 435 Prin. of Auto Controls	3
MAE 302 Engr. Thermo II	3
MAE 306 Mech. Engr. Lab II	1
MAE 308 Fluid Mechanics I	3
MAE 310 Conduct. & Radia. Heat Transfer	3
Humanities, Soc. Sci.* or Free Elective	3
	<hr/> 16

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>
MAE 405 Mech. Engr. Lab III	1
MAE 410 Convection Heat Trans. & Fluid Flow	3
MAE 415 Mech. Engr. Analysis	3
Departmental Elective	6
Humanities, Soc. Sci.* or Free Elective	3
	<hr/> 16

<i>Spring Semester</i>	<i>Credits</i>
MAE 412 Energy Systems	3
MAE 416 Mech. Engr. Design	4
Departmental Elective	3
Humanities, Soc. Sci.* or Free Elective	6
	<hr/> 16

Minimum Hours Required for Graduation ... 133

Students may elect to take PY 201, 202 and 203 in place of PY 205, 208. Rearrangement of the schedule of courses to accomplish this will be worked out in consultation with the student's adviser.

*See information concerning the humanities, social science sequence for School of Engineering.

**A grade of C or better is required in MAE 208 before taking MAE 315.

***A grade of C or better is required in MAE 301 before taking MAE 302 and MAE 310.

AEROSPACE ENGINEERING CURRICULUM

See the freshman year School of Engineering.

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>
CSC 111 Intro. to FORTRAN	2
MA 202 Analytic Geometry & Calc. III	4
MAE 206 Engr. Statics	3
PY 208 General Physics	4
Humanities/Soc. Sci. Elective ¹	3
Physical Education Elective	1
	<hr/> 17

<i>Spring Semester</i>	<i>Credits</i>
MA 301 Appl. Diff. Equations	3
MAE 208 Engineering Dynamics ¹	3
MAE 261 Aero. Vehicle Performance	3
MAE 314 Solid Mechanics	3
MAT 201 Struct. of Engr. Mat.	3
MAT 210 Exp. in Material Engr.	1
Physical Education Elective	1
	<hr/> 17

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>
ECE 331 Prin. of Elec. Engr.	3
ECE 339 Prin. of Elec. Engr. Lab	1
MAE 301 Engr. Thermodynamics I ¹	3
MAE 355 Aerodynamics I	3
MAE 357 Aerodynamics I Lab	1
MAE 371 Aero. Vehicle Struct. I	3
Humanities, Soc. Sci. or Free Elective	3
	<hr/> 17

<i>Spring Semester</i>	<i>Credits</i>
MAE 356 Aerodynamics II	3
MAE 358 Aerodynamics II Lab	1
MAE 365 Propulsion I	3
MAE 435 Principles of Auto Control	3
MAE 472 Aero. Vehicle Struct. II	3
MAE 473 Aero. Vehicle Struct. II Lab	1
Humanities/Soc. Sci. Elective	3
	<hr/> 17

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
MAE 455 Boundary Layer Theory	3	MAE 479 Aero. Vehicle Design II	3
MAE 462 Flight Veh. Stab. & Con.	3	Departmental Elective	3
MAE 465 Propulsion II	3	Humanities/Soc. Sci. Elective	3
MAE 466 Propulsion II Lab	1	Free Electives	6
MAE 478 Aero. Vehicle Design I	2		15
Humanities/Soc. Sci. Elective	3		
Free Elective	3		
	18	Minimum Hours Required for Graduation ...	134 ²

¹Must be completed with a grade of C or better.

²A GPA of 2.0 or better is required for both (a) all courses taken at NCSU and (b) for all MAE courses.

NUCLEAR ENGINEERING

Burlington Engineering Laboratories (Room 1110-B)

Professor P. J. Turinsky, Head of the Department

Professor O. E. Hankins, Coordinator of Advising

Professors: R. P. Gardner, K. L. Murty, R. F. Saxe, C. E. Siewert, K. Verghese; *Professors Emeriti:* R. L. Murray, E. Stam, L. R. Zumwalt; *Associate Professors:* O. H. Auciello, J. G. Gilligan; *Assistant Professor:* J. M. Doster; *Lecturer and Health Physicist:* K. V. Mani; *Senior Extension Specialist:* J. Kohl; *Director of Nuclear Reactor Program:* B. W. Wehring; *Associate Director of Nuclear Reactor Program:* G. D. Miller; *Reactor Operator Training Manager:* J. R. Caves; *Nuclear Service Manager:* J. N. Weaver.

Nuclear engineering is concerned with the engineering aspects of the control, release and utilization of nuclear energy from both fission and fusion. Nuclear reactors serve many functions—they serve as heat sources for electric power plants, are the basis of modern propulsion systems for ships and submarines, and produce fissionable and radioactive isotopes for a variety of peaceful applications. Nuclear methods are applied in medical diagnosis and treatment, scientific research, and the search for new resources. The nuclear engineering program educates individuals in scientific and engineering principles essential for effective and productive contributions in industrial, university and government service.

The Nuclear Engineering Program, which is accredited by the Accreditation Board for Engineering and Technology (ABET), leads to the degree Bachelor of Science in Engineering.

OPPORTUNITIES

Nuclear power reactor construction continues with over one hundred reactors now operating in the nation, increasing our reliance upon nuclear energy as a substitute for energy from fossil fuels. Development of breeder and fusion reactors offers the potential of vast new energy sources. Industrial and medical applications of radiation continues to increase in diverse industries. A demand for nuclear engineers exists within the electric power industry and national laboratories.

SCHOLARSHIPS AND AWARDS

Several special scholarships exist for NCSU nuclear engineering students, including the Bechtol, Carolina Power and Light, Ebasco, Institute for Nuclear Power Operations, and American Nuclear Society scholarships. NCSU nuclear engineering students have gained national recognition by several times receiving the Student Design Award of the American Nuclear Society and being recipients of nationally awarded fellowships.

FACILITIES

Facilities for nuclear education include: a nuclear research reactor (PULSTAR), which can be operated at a steady state of 1 MW or pulsed to 2200 MW; radiation detectors and multi-channel analyzers; nuclear materials laboratory; thermal hydraulic laboratory;

prompt gamma facility; neutron radiography unit; numerous computer facilities including CRT terminals, access to an IBM System 3081, VAX 11/750 minicomputer, several engineering workstations, and two dozen microcomputers; fusion laboratory; neutron activation analysis laboratory; and high- and low-level radiochemistry laboratories.

CURRICULUM

Nuclear engineers work in nuclear systems research, design, development, testing, operation, environmental protection, and marketing. The Bachelor of Science program prepares graduates for positions in industry or government laboratories or for graduate study (see listing of graduate degrees offered). The curriculum incorporates basic sciences and engineering, with emphasis on mathematics and physics, followed by coursework in nuclear science and technology. Attention is given to the engineering design of nuclear reactors and nuclear radiation systems and to energy resources and environmental aspects of nuclear energy.

See the freshman year School of Engineering.

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CSC 111 Intro. to FORTRAN Programming	2	CE 213 Introduction to Mechanics	3
MA 202 Analytic Geometry and Calc. III	4	ECE 331 Principles of Electrical Engr.	3
MAT 201 Struct. and Prop. Engr. Materials	3	MA 301 Applied Diff. Equations I	3
PY 208 General Physics	4	NE 202 Fundamentals of Nuclear Energy	4
Humanities/Soc. Sci. Elective	3	Humanities/Soc. Sci. Elective	3
Physical Education Elective	1	Physical Education Elective	1
	17		17

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ECE 332 Principles of Electrical Engr. II	3	MA 401 Applied Diff. Equations II	3
MAE 301 Engr. Thermodynamics I	3	NE 302 Nucl. Reactor Energy Conversion	4
MAE 308 Fluid Mechanics I	3	NE 401 Reactor Analysis and Design	4
NE 301 Fundamentals of Nucl. Engr.	4	PY 410 Intro. Mod. Physics for Nucl. Engr.	3
Humanities/Soc. Sci. Elective	3	Free Elective	3
	16		17

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
NE 402 Reactor Engineering	4	NE 403 Nuclear Engr. Design Proj.	3
NE 405 Reactor Systems	3	NE 409 Nuclear Materials	2
NE 404 Radiol. Reactor & Environ. Safety	3	Approved Technical Elective*	3
Humanities/Soc. Sci. Elective	3	Approved NE Elective*	3
Free Elective	3	Humanities/Soc. Sci. Elective	3
	16	Free Elective	3
			17

Minimum Hours Required for Graduation ... 133

*Courses must be taken from the departmental list of approved courses.

TEXTILE ENGINEERING

(Also see School of Textiles)

Nelson Textile Building (Room 103)

Professor S. P. Hersh, Head of the Department of Textile Engineering and Science

Professor B. S. Gupta, Assistant Head

(For a list of faculty, see Textile Engineering and Science)

The textile industry is rapidly changing to become a capital intensive, high-technology industry. Applications of computers and robotics is commonplace in the modern plant. Textile engineering is concerned with the application of scientific principles and engineering practice to the design and control of all aspects of fiber, textile and apparel processes, products and machinery. These include natural and man-made fibers, composites, safety and health, pollution control and energy conservation and management.

Modern textiles are crucial major components of emerging developments in the medical, space, aeronautical and communications fields. Artificial kidneys, bones, hearts and arteries, rocket shields, space shuttle nose cones and insulation, space suits, composite airplane bodies—all involve the use of textile fibers and fabrics to produce engineered structures. Structural- and geo-textiles are used in a large number of applications, such as water desalination, stadium roofs, air supported buildings, reservoir liners, road beds and composites.

The new Textile Engineering program, in accordance with ABET procedures, will be presented for accreditation following graduation of the first students in 1987-88. The program leads to the degree Bachelor of Science in Textile Engineering.

FACILITIES AND SCHOLARSHIPS

(See School of Textiles)

OPPORTUNITIES

Because the modern production and utilization of textile materials requires young people highly competent in the areas of engineering, mathematics, science and technology, graduates of the program are prepared for challenging careers in the primary textile, man-made fiber, apparel and nonwovens industries, as well as the automotive and aerospace and construction industries. Opportunities abound in plant engineering, design engineering, production control, process engineering, product development, microelectronics, robotics and automation.

TEXTILE ENGINEERING CURRICULUM

The Textile Engineering program investigates how scientific principles and engineering practices can be applied to the diverse requirements of textile materials, processes, structures and machinery. The program combines study of textile, physical, mathematical and social sciences with engineering analysis and design techniques. Students study the interaction of fibers and fabrics with machinery, as well as consider such issues as safety and health, pollution control, and energy management. Completion of a B.S. in Textile Engineering provides the individual with a broad engineering background suited to addressing textile engineering problems.

Since training in textile engineering involves two distinct technical fields—textiles and engineering—the curriculum is a joint responsibility of the two schools and is so administered.

See the freshman year for the School of Engineering.

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CSC 111 Intro. to FORTRAN Programming <i>or</i>		MA 301 Applied Differential Equations	3
CSC 101 Introduction to Programming	2-3	MAE 208 Engineering Dynamics <i>or</i>	
MA 202 Analytic Geometry & Calc. III	4	CE 215 Engr. Mechanics—Dynamics	3
MAE 206 Engineering Statics <i>or</i>		MAE 314 Solid Mechanics <i>or</i>	
CE 214 Engineering Mechanics—Statics	3	CE 313 Mechanics of Solids	3
PY 208 General Physics II	4	ST 361 Intro. to Statistics for Engr.	3
Free Elective	3	TE 201 Polymer & Fiber Sci. & Engr.	4
Physical Education Elective	1	Humanities/Soc. Sci. Elective*	3
	17-18		19

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ECE 331 Prin. of Electrical Engr. I	3	ECE 332 Prin. of Electrical Engr. II or	
MAE 301 Engr. Thermodynamics I	3	MAE 435 Prin. of Auto Controls	3
MAE 308 Fluid Mechanics I	3	ENG 321 Communicating Technical Info	3
TE 301 Textile Manuf. Process I	4	TE 302 Textile Manuf. Process II	4
Humanities/Soc. Sci. Elective*	3	TMT 380 Mgmt. & Cont. of Textile Sys.	3
Physical Education Elective	1	Humanities/Soc. Sci. Elective	3
	17	Free Elective	3
			19

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
TE 303 Textile Chemical Process	4	TE 402 Textile Engineering Design II	4
TE 401 Textile Engineering Design I	4	TE 404 Textile Quality Control	4
TE 403 Mechanics Fiber Structure	3	Humanities/Soc. Sci. Elective	3
Engineering Elective	3	Free Elective	3
Humanities/Soc. Sci. Elective	3		14
	17		

Minimum Hours Required for Graduation ... 137

*EB 201 should be taken prior to the spring semester of the junior year.

PROFESSIONAL DEGREES

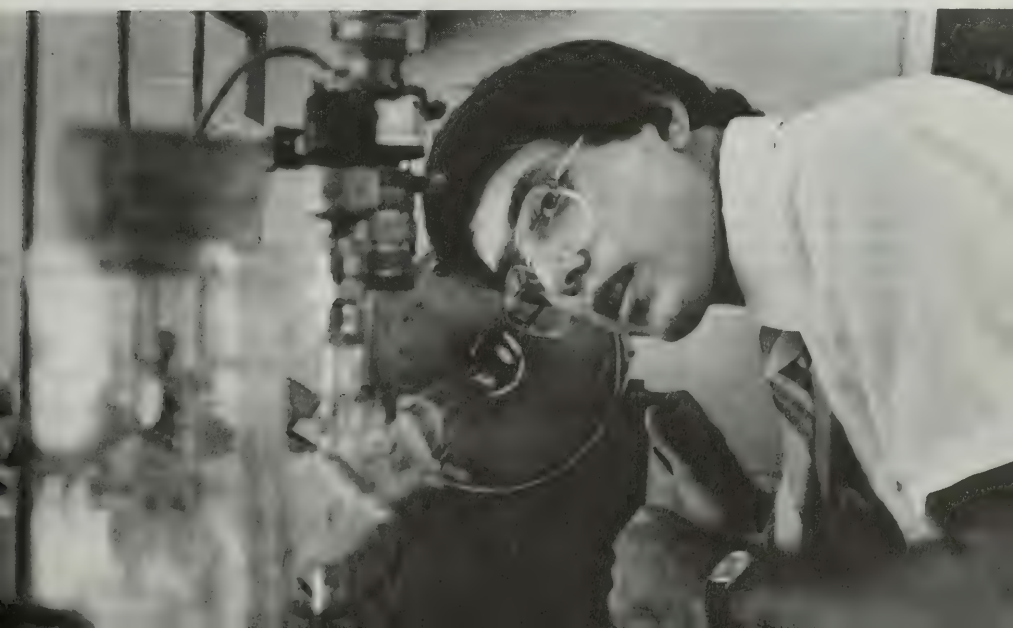
The School of Engineering offers professional curricula leading to the degrees of Chemical Engineer, Civil Engineer, Electrical Engineer, Industrial Engineer, Materials Engineer, Mechanical Engineer, and Nuclear Engineer. This program is designed for engineering students holding baccalaureate degrees who find that an additional year of education is desirable, for practicing engineers who desire to take a year of professional work to update their training, and for students holding physical sciences or mathematics degrees who seek a professional level of education in engineering. The program is intended to be sufficiently flexible to meet a wide variety of student needs, and to emphasize professional course work. The curriculum consists of a minimum of 30 hours of credit at the 400 level or above, including at least 15 hours of credit at the 500 level or above.

Applicants who hold the bachelor's degree in engineering, physical sciences, or mathematics may be admitted to the professional program of the School of Engineering upon application and presentation of official credentials. For unconditional admission, these credentials must show a minimum grade point average of 2.5 overall. Admission on a provisional basis may be granted to applicants who do not meet the formal requirements. In the case of insufficient preparation, prerequisite courses will be prescribed in addition to the normal fifth-year requirements.

The following requirements of the School of Engineering will be observed:

1. Professional degree students are admitted through the Undergraduate Admissions Office as fifth-year professional degree (PR) students. They are subject to rules and regulations as established and administered by the Dean of the School of Engineering.
2. Application forms for admission to the professional degree program should be completed and submitted to the Director of Extradepartmental Degree Programs at least 60 days in advance of the semester in which admission is sought. Acceptance of a student for the professional program is based on the recommendation of his department and the approval of the Director of Extradepartmental Degree Programs. At the time of acceptance, N.C. State University students may transfer a limited number of excess credits to their professional program.
3. A limited amount of credit to be applied toward the requirements for the professional degree may be transferred to N.C. State University from recognized institutions offering advanced work in engineering and related fields. Such a transfer of credit must be approved by the department in which the student does his major work and by the Dean of the School of Engineering.

4. A graduate in one field of engineering may choose to work for a professional degree in another field provided he or she has the permission of the department. The student will be expected to take necessary prerequisite courses in addition to those required for the professional degree program.
5. Each fifth-year student will be assigned to an advisor in the sponsoring department. The function of the advisor is to assist the student in preparing a program of study and to counsel the student with regard to his or her academic work. Prior to the midterm of the first semester, the student and his or her advisor should agree on a program of study for the professional degree. Program of Study for Professional Degree forms will be prepared and submitted to the office of the Director of Extradepartmental Degree Programs as well as to the department. Upon approval of the Office of the Dean, this becomes the student's degree program.
6. Grades for each completed course are reported to the Dean of the School of Engineering and to the Office of Registration. A minimum grade of "C" must be made in each course to obtain credit. A quality point average of 2.5 in all course work must be maintained to satisfy requirements for a professional degree.
7. All courses taken by the student after admission to the professional program will count toward the overall grade point average even though an individual course may not be a part of the degree program.
8. A student who falls below 2.5 average will be placed on probation and given one semester to raise the overall average up to a 2.5. If the student has been admitted on a provisional basis, he or she must make a 2.5 average the first semester in order to continue.
9. Work completed more than six years prior to the date on which the professional degree is to be granted may not be used as credit toward the professional degree, unless approved by the head of the department concerned and the Director of Extradepartmental Degree Programs.
10. A professional degree student who has been admitted to the Graduate School may, with the approval of a Master's Degree committee and the Graduate School, transfer nine hours of credit for courses in which a grade of B or higher was received.
11. A student may transfer only once; that is, from the Professional Degree Program to the Graduate School or from the Graduate School to the Professional Degree Program. Therefore, a student is not permitted to return to either program after having transferred from that degree program.
12. It is intended that professional degree students will complete a substantial portion of credit hours toward the degree while in residence on the NCSU campus.



SCHOOL OF FOREST RESOURCES

Biltmore Hall (Room 2028)

E. L. Ellwood, *Dean*

E. B. Cowling, *Associate Dean for Research*

L. C. Saylor, *Associate Dean for Academic Affairs and Coordinator of Advising*

J. P. Abbott, *Forest Resources Librarian*

The management and utilization of the South's forest resources and products provide opportunities for challenging professional careers. Forests provide a variety of goods—timber, water, wildlife and recreation environments—vital to the economy and well being of North Carolina. Graduates of the school are qualified for professional positions managing forest lands, or producing the products or managing the services developed from these lands. Emphasis is placed on natural renewable resource management because the wise use of the products and amenities that can be derived from forest lands is central to preserving environmental quality and the quality of life.

North Carolina is an important forest state. Its 19 million acres of commercial forest land, comprising two-thirds of the state's land area, form the base for goods and services valued at over ten billion dollars annually. Nearly 20 percent of the state's industrial labor force is associated with forest based organizations; forests support the southern region's largest industry. New wood-using industries continue to move into the South, creating multi-billion dollar outputs. Similarly, recreational activities continue to expand as a result of growing population, affluence, mobility and leisure time.

As a result of this growth, forest based industries and governmental agencies need well-educated, technically competent personnel.

Some of the programs in the School of Forest Resources are not duplicated in other southern universities, so the Trustees of the University and the Southern Regional Education Board have designated them as regional in nature.

DEGREE PROGRAMS

Five curricula are administered in the school through its Departments of Forestry, Recreation Resources Administration, and Wood and Paper Science. These programs provide a broad education in the biological and physical sciences as well as a sound cultural and professional background. Students are prepared for careers in the fields of conservation, forestry, recreation resources administration, pulp and paper science and technology, and wood science and technology.

Freshmen have a nearly common core of courses during the first semester allowing deferment of the final selection of a curriculum for two or three semesters. To assist students with a better understanding of their major area of study, introductory courses are given in each curriculum.

Graduate degrees offered include: Master of Science, Master of Forestry, Master of Recreation Resources, Master of Wood and Paper Science and the Doctor of Philosophy. Applicants should consult the Graduate Catalog for additional information about these programs.

FIELD INSTRUCTION AND EXPERIENCE

All students (except those in conservation) are required to complete the equivalent of one or more of the following summer activities: (1) camp, (2) internship, (3) practicum, (4) work experience.

A summer camp which normally follows the sophomore year is required of all forestry students.

Undergraduates enrolled in recreation resources administration complete a nine-weeks internship immediately following the completion of the junior year.

All pulp and paper majors spend at least one summer working in a pulp and paper mill designated by the school.

Wood science and technology students attend a summer practicum following the sophomore year.

Additional field instruction and scheduled trips to representative industries and agencies are required frequently as a part of regular class assignments.

HONORS PROGRAM

Students making exceptional academic records during their freshman and sophomore years may, with faculty approval, follow an honors program. Honors students develop more rigorous programs of study, frequently taking advanced courses in mathematics, chemistry, statistics and economics. With the adviser's consent honors students may substitute preferred courses for normally required courses in order to develop strength in special interest areas. Honors students are required to undertake a program of independent study which can involve a research problem or special project during their junior or senior year, and they must participate in the senior honors seminar.

SCHOLARSHIPS

Academic scholarships (ranging from \$1000 to \$4,000) in several program areas are available for entering freshmen who have excelled in their high school academic and extracurricular endeavors. These awards include: (1) four renewable scholarships for entering students in the forestry major, (2) three renewable scholarships for students enrolling in the wood science and technology curriculum, and (3) twenty-five awards, renewable for up to four years, for students majoring in pulp and paper science and technology.

HONOR SOCIETIES

The School of Forest Resources has two honors societies—Xi Sigma Pi (for all majors within the school) and Rho Phi Lambda (for recreation majors)—that promote and recognize academic excellence. Students completing a minimum of one year of study with high academic achievement are invited to become members of these societies.

INTERNATIONAL ACTIVITIES

Students are exposed to international dimensions of their programs in a variety of ways. Many faculty members regularly travel abroad and several are active in major projects in foreign countries, including an international cooperative research project concentrating on Central America and Mexico. In addition, a significant number of foreign students enroll in the school, including in recent years from as many as 21 different countries from all parts of the world.

FOREST RESOURCES EXTENSION

The Forest Resources Extension program, a part of the Agricultural Extension Service, is the largest program of its type in the United States. It serves landowners, industries and public agencies in the areas of forestry, recreation, wildlife and wood and paper. Its primary responsibility is promoting the application of new ideas developed through research and experience.

In cooperation with the Division of Lifelong Learning, short courses are offered in a number of fields to provide industry and government employees an opportunity to keep abreast of modern developments in techniques and equipment.

FACILITIES AND LABORATORIES

A school library and most classrooms are housed in Biltmore Hall. Among special education facilities in Forest Resources are: 80,000 acres in forests including the Hofmann

Forest on the coastal plain; the Hill, Schenck, Hope Valley and Goodwin Forests in the Piedmont; and the Slocum summer camp at the Hill Forest in Durham county. Specialized laboratories unique to the South are the Hodges Wood Products Laboratory housing machining, gluing, finishing, preserving, testing and research laboratories, a sawmill, a dry kiln and a veneer lathe; and the Robertson Laboratory with wood preparation, chemistry, pulping, testing and coloring laboratories, digesters and a small paper machine.

CONSERVATION

(Also see Agriculture and Life Sciences.)

J. W. Gilliam, *Major Adviser, School of Agriculture and Life Sciences*

L. C. Saylor, *Major Adviser, School of Forest Resources*

Conservation is wise use, perpetuation, or improvement of natural resources for the long-term benefit of society. Rapid urbanization and industrialization, and increasing population are increasing pressure on the use of land areas for food and fiber, for wood and water and for recreation. These trends require trained people to make sound judgments in natural resources management and use.

The Schools of Forest Resources and Agriculture and Life Sciences—with strong programs in forestry, recreation, wood and paper science, ecology, soils, wildlife and the basic biological sciences—jointly offer a baccalaureate program in conservation. Conservation graduates are trained in the basic concepts of several disciplines to apply a conservation philosophy to problem-solving in a modern society.

CURRICULUM IN CONSERVATION

Students may enroll in either Forest Resources or Agriculture and Life Sciences, depending on their primary area of interest in conservation. The freshman common core of courses for either school is acceptable. All students take a prescribed core of subjects in conservation plus specified courses in one of five concentrations: soil conservation; environmental technology; environmental education; natural resource management and administration; communications. A dual degree program involving the conservation curriculum with another curriculum, e.g., science education, pest management, recreation, soil science, forestry is very feasible and recommended.

Language (12 Credits)

ENG 111	Composition and Rhetoric	3
ENG 112	Composition and Reading	3
ENG 321W	Communication of Technical Information	3
SP 110	Public Speaking	3

Social Sciences and Humanities (21 Credits)

EB 212	Economics of Agriculture	3
PS 201	Introduction to American Government	3
	Literature Elective	3
	Electives	12

Physical and Biological Sciences (29 Credits)

BS 100	General Biology <i>or</i>	
BO 200	Plant Life	4
CH 101	General Chemistry I	4
CH 103	General Chemistry II <i>or</i>	
CH 107	Principles of Chemistry	4
MA 111	Algebra and Trigonometry	4
MA 113	Introduction to Calculus	4
PY 221	College Physics	5
ZO 201	General Zoology <i>or</i>	
BO 200	Plant Life	4

*Physical Education and Free Electives
(13 Credits)*

PE 100 Health & Physical Fitness	1
Physical Education	3
Free Electives	9

*Departmental Requirements and
Electives (56 Credits)*

BO(ZO) 360 Introduction to Ecology	4
FOR 252 Fundamentals of Forest Management	4
FOR 401 Watershed Management	4
FOR 472 Renewable Resource Management	4
MEA 110 Physical Geology Lab	1
MEA 120 Elements of Physical Geology	2
RRA 241 Recreation Resource Relationships	3
SSC 200 Soil Science	4
ST 311 Introduction to Statistics	3
ZO(FW) 221 Conservation of Natural Resources	3
ZO(RW) 353 Wildlife Management <i>or</i>	3
ZO(FW) 420 Fishery Science	3
Biological Sciences Electives	6
Conservation Electives	16
Minimum Hours Required for Graduation	131

SOIL CONSERVATION CONCENTRATION

PM 111 Integrated Pest Management	1
SSC(BAE) 321 Water Management	4
SSC 361 Soil Resources and Land Use	3
SSC 452 Soil Classification	4
SSC 461 Soil Physical Properties and Plant Growth	3
SSC 492 Senior Seminar in Soil Science	1
	16

ENVIRONMENTAL TECHNOLOGY CONCENTRATION¹

BAE(CE) 578 Agricultural Waste Management ²	3
CE 486 Measurements of Water Quality	3
FS 405 Food Microbiology	3
SSC 361 Soil Resources and Land Use	3
SSC 452 Soil Classification	4
	16

¹MB 401, Microbiology, is required biological sciences elective.

²or BAE(SSC) 321 Water Management

NATURAL RESOURCE MANAGEMENT AND ADMINISTRATION CONCENTRATION³

PS 312 Introduction to Public Administration	3
EB 307 Business Law I	3
EB 410 Public Finance	3
EB 436 Environmental Economics	3
FOR 491 Sr. Problems in Forestry <i>or</i>	3
PS 491 Internship in Political Science <i>or</i>	1
SSC 492 Sr. Seminar in Soil Science	3
MEA 200 Introduction to the Marine Environment	3
	16

³PS 202, State and Local Government and EB 301, Intermediate Microeconomics, are required social science electives.

ENVIRONMENTAL EDUCATION CONCENTRATION⁴

ED 203 Introduction to Teaching Mathematics and Science	3
ED 296D Special Topics in Science Education	1
ED 475 Methods of Teaching Science	3
Electives	9
	16

⁴PHI(ED) 304, Philosophy of Education, is a required elective.

COMMUNICATIONS CONCENTRATION⁵

ENG 214	Copyediting	3
ENG 215	Principles of News and Article Writing	3
SP 112	Basic Principles of Interpersonal Communication	3
SP 201	Theories of Persuasive Communication	3
SP 298	Special Projects in Speech-Communication or	
FOR 491	Senior Problems in Forestry or	
SSC 492	Senior Seminar in Soil Science	1
Elective		3
		16

⁵SOC 302, Mass Communications, is a required social science elective.

FORESTRY

Biltmore Hall (Room 2018)

Professor Arthur W. Cooper, Head of the Department

Professors: F. E. Bridgwater (USFS), S. W. Buol, A. W. Cooper, E. B. Cowling, C. B. Davey, P. D. Doerr, M. H. Farrier, E. C. Franklin, D. J. Frederick, L. F. Grand, W. L. Hafley, A. E. Hassan, R. D. Hazel, D. L. Holley, Jr., W. T. Huxster, R. C. Kellison, S. Khorram, G. Namkoong (USFS), R. L. Noble, T. O. Perry, L. C. Saylor, A. G. Wollum; *Adjunct Professors:* G. F. Dutrow, J. D. Hair, N. E. Johnson, A. Krochmal, D. A. MacKinnon, L. J. Metz, W. E. Towell, C. G. Wells; *Professors Emeriti:* R. C. Bryant, W. M. Keller, W. D. Miller, R. J. Preston, F. E. Whitfield, B. J. Zobel; *Associate Professors:* D. A. Adams, H. V. Amerson, R. I. Bruck, J. D. Gregory, L. H. Harkins, L. G. Jervis, J. B. Jett, J. G. Laarman, R. A. Lancia, R. Lea, J. R. McGraw, D. H. J. Steensen, R. J. Weir; *Adjunct Associate Professors:* G. L. DeBarr, J. R. Jorgensen, R. W. Stonecypher; *Associate Professor Emeritus:* E. M. Jones; *Assistant Professors:* H. L. Allen, R. R. Braham, J. E. deSteiguer (USFS), L. J. Frampton, S. E. McKean, L. A. Morris, J. P. Roise, A. M. Stomp; *Adjunct Assistant Professors:* J. A. Barker, D. L. Bramlett, R. G. Campbell, M. S. Greenwood, W. E. Ladrach, R. B. McCullough, H. D. Smith, E. C. Soutiere; *Instructor:* J. L. Bettis; *Lecturers:* G. B. Blank, W. D. Smith; *Specialists:* W. E. Gardner, R. A. Hamilton, V. A. Molinos; *Director of CAMCORE:* W. S. Dvorak; *Liaison Geneticist:* J. R. Sprague; *Research Associates:* J. A. Brockhaus, W. W. Cure, R. L. Sanford, Jr., L. A. Smith; *Research Assistants:* P. M. Bean, H. M. Cheshire, J. K. Donahue, D. W. Hazel, D. L. Mengel, M. D. Smith; *Associate Members of the Faculty:* H. A. Devine (Recreation Resources), F. B. Hain (Entomology), L. E. Hinesley (Horticultural Science), D. E. Moreland (USDA-Crop Science), L. A. Nelson (Statistics), R. A. Powell (Zoology), A. L. Sullivan (Landscape Architecture), R. R. Wilkinson (Landscape Architecture).

OPPORTUNITIES

Graduates are in demand by state and federal land-managing agencies, by industrial concerns growing wood as raw material, and by other organizations and agencies which employ forest managers. Some graduates are self-employed as consultants, may work in urban or other tree management professions, or as operators or owners of forest oriented businesses. Other graduates go on to graduate study in forestry, ecology, and related sciences.

CURRICULUM

The forestry curriculum provides students with a basic educational background of biological, physical, and social sciences, humanities, mathematics and communication skills. Interspersed throughout the curriculum are forestry courses that deal with a wide variety of professional activities. The goal of the program is to produce well-educated forestry graduates who have the basic knowledge, skills, flexibility, and attitude needed for successful professional performance. Academic studies on campus are supplemented by practical laboratory exercises in forest areas.

SUMMER CAMP

An intensive summer camp experience, with work in the Coastal Plain, Piedmont and Mountain regions of North Carolina is required. The camp is based at the school's Hill Demonstration Forest north of Durham with trips taken to other regions. Four-year students take summer camp after the sophomore year; two-year transfer students take summer camp prior to beginning their junior year. In order to be eligible for summer camp a student must (1) have made a C or better in ENG 111 and 112, or their equivalents, (2) have passed BO 200 and MA 114 or their equivalents, and (3) have no more than one D in FOR 110, 212, 272 or a grade of C or better in FOR 111 for transfer students.

ELECTIVES

The curriculum provides for 11 hours of technical electives in forestry and related fields, along with the university-prescribed 9 hours of free electives and 18 hours of humanities and social science electives. Students are encouraged to use these electives so as to build an area of study that complements the major or adds an additional field of expertise to the program. The student should consult with the faculty adviser when choosing elective courses.

DUAL DEGREE PROGRAMS

Programs have been arranged with other departments whereby students can obtain, in addition to the Bachelor of Science degree in forestry, a second Bachelor of Science degree in such areas as agricultural economics, conservation, entomology, recreation resources administration, wood science and technology, or fisheries and wildlife science. These joint programs usually require additional credits above the forestry electives and free elective credits. Depending upon ability, students may complete the degree requirement by carrying additional credits in their four-year program or by enrolling for an extra semester or equivalent summer session.

FORESTRY CURRICULUM

FRESHMAN YEAR			
<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
BO 200 Plant Life	4	CH 101 General Chemistry I	4
ENG 111 Composition & Rhetoric	3	ENG 112 Comp. & Reading	3
FOR 110 Introduction to Forestry	3	MA 114 Intro. Finite Math. Application (MA 212, MA 201)	3
MA 113 Introduction to Calculus (MA 112, MA 102)	4	WPS 202 Wood Struct. Prop.	3
PE 100 Health & Physical Fitness	1	ZO 201 General Zoology	4
	15	Physical Education Elective	1
			18

SOPHOMORE YEAR			
<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 107 Prin. of Chem. (CH 103)	4	FOR 273 Quantative Methods in Forest Res.	3
FOR 212 Dendrology	4	PY 221 College Physics	5
FOR 272 Biometry	3	SSC 200 Soils	4
Humanities/Soc. Sci. Elective	3	Humanities/Soc. Sci. Elective	3
Physical Education Elective	1	Physical Education Elective	1
	15		16

SUMMER CAMP	
FOR 204 Silviculture	2
FOR 261 Forest Biology	2
FOR 264 Forest Protection	2
FOR 274 Mapping & Mensuration	3
	9

JUNIOR YEAR			
<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
EB 212 Econ. of Agriculture	3	FOR 304 Silviculture	4
ENT 301 Intro. to Forest Insects	3	FOR 319 Forestry Economics	3
FOR 303 Silvics-For. Ecol.	4	PP 318 Forest Pathology	4
Humanities/Soc. Sci. Elective	3	ST 312 Forest Biometry	3
Technical Elective	3	Humanities/Soc. Sci. Elective	3
	16		17

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
FOR 353 Air Photo Interpretation	3	FOR 406 For. Inventory, Analysis & Plan.	4
FOR 405 Forest Land Mgmt.	4	FOR 472 Renewable Resource Policy & Mgmt. ...	4
Humanities/Soc. Sci. Elective	3	Technical Elective	4
Technical Elective	4	Free Electives	6
Free Elective	3		18
	17		

Minimum Hours Required for Graduation ... 141

FORESTRY CURRICULUM FOR TRANSFER STUDENTS

Many students transfer into forestry after completing one or two years of study at another institution or at NCSU. Transfer students follow one of two options: 1) those with less than 50-55 hours of credit enter in the fall and begin their study with the sophomore year courses of the four-year Forestry curriculum, or 2) those with 55-65 semester hours may enroll in FOR 111 which is offered during the last two weeks of May, then go directly to summer camp and begin as juniors in the fall, thus completing their program in two years.

The sequence of courses for students pursuing this option is:

SUMMER CAMP

FOR 111 Introduction to Field Forestry	2
FOR 204 Silviculture	2
FOR 261 Forest Biology	2
FOR 264 Forest Protection	2
FOR 274 Mapping and Mensuration	3
	11

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ENT 301 Intro. to Forest Insects	3	FOR 273 Quantitative Methods in Forest Resources	3
FOR 212 Dendrology	4	FOR 319 Forestry Economics	3
FOR 272 Biometry I	3	FOR 304 Silviculture	4
FOR 303 Silvics-Forest Ecology	4	SSC 200 Soils	4
Technical Elective	3	ST 312 Forest Biometry	3
	17		17

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
FOR 353 Air Photo Interp.	3	FOR 406 For. Inventory, Analysis & Plan.	4
FOR 405 Forest Land Mgmt.	4	FOR 472 Ren. Res. Policy & Mgmt.	4
WPS 202 Wood Struc. Prop.	3	PP 318 Forest Pathology	4
Technical Electives	4	Technical Electives	4
	14		16

Minimum Hours Required for Graduation ... 141

RECREATION RESOURCES ADMINISTRATION

Biltmore Hall (Room 4008)

Professor M. R. Warren, Jr., Head of the Department

Professors: H. A. Devine, C. D. Siderelis, R. E. Sternloff; *Professors Emeriti:* T. I. Hines, W. E. Smith; *Associate Professors:* D. F. Culkin, S. L. Kirsch, P. S. Rea; *Associate Professors Emeriti:* G. A. Hammon, L. L. Miller, C. C. Stott; *Assistant Professors:* C. S. Love, R. R. Perdue, B. E. Wilson; *Adjunct Associate Professor:* H. K. Cordell; *Adjunct Instructors:* R. L. Buckner, J. I. Connors, W. C. Singletary, Jr.

Recreation Resources Administration is an interdisciplinary program combining elements of natural resource management with a concern for human services. Standards

adopted by the recreation profession make college graduation a requirement for employment. North Carolina State University has facilities, staff, curriculum, program and an established reputation for comprehensive professional education in recreation and parks. The program is nationally accredited.

OPPORTUNITIES

As more and more discretionary time becomes available for large segments of the American population, opportunities for growth in the leisure service professions have increased dramatically. A recreation and park professional's goal is to influence people to use their discretionary time wisely and to improve the quality of their lives. This goal is accomplished by providing recreation programs and facilities for people in a variety of settings.

Career opportunities include employment by park and recreation departments operated by county and municipal governments; employment by state agencies such as state parks, forests, and planning and advisory groups; and the federal government with agencies such as the National Park Service, Corps of Engineers, U. S. Forest Service, and military establishments.

Other major employers include youth and family service organizations such as the YMCA, YWCA, Boys Clubs, Boy and Girl Scouts. Industries employ recreation directors to head employee recreation programs. Recreation professionals are employed by schools as community school coordinators. An area with perhaps the greatest growth potential for employment is with commercial, private recreation establishments such as resorts, private clubs, amusement parks, campgrounds, and condominiums.

CURRICULUM IN RECREATION RESOURCES ADMINISTRATION

The curriculum in recreation resources administration offers a broad general education background, basic professional and technical courses, and the opportunity to specialize in a particular field of recreation. General education courses are in biology, psychology, sociology, political science, English, mathematics, physical sciences, and economics. Specialized courses are required in statistics and the use of computers.

The curriculum is designed to prepare men and women for a variety of positions in a young, dynamic and challenging profession. The focus of the curriculum is on management rather than face-to-face leadership. The curriculum provides 44 hours of professional course work that includes recreation philosophy, management techniques and skills, fiscal management, supervision, facility and site planning, programming, administration, and analysis and evaluation. A computer laboratory is utilized in many courses to provide the student with the best current technology available.

In addition to the general education requirements and the core professional requirements, students can begin to attain specialized training through 18 hours of concentration courses. At the beginning of the students' junior year they choose one of the following concentrations: commercial recreation, park management, natural resource management, program management (including special emphasis in sports or arts management).

Academic studies on campus are supplemented by practical laboratory experiences in the Raleigh area, out-of-state field trips and study opportunities, and a ten-week internship with a park and recreation agency. Cooperative work-study programs are encouraged with a variety of park and recreation agencies.

FRESHMAN YEAR			
<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
BO 200 Plant Life <i>or</i>		ENG 112 Composition & Reading	3
ZO 201 Animal Life	4	SP 110 Public Speaking <i>or</i>	
ENG 111 Composition & Rhetoric	3	SP 112 Basic Prin. of Int. Comm.	3
MA 113 Introduction to Calculus <i>or</i>		RRA 152 Introduction to Recreation	3
MA 122 Mathematics of Finance <i>or</i>		CH <i>or</i> PY Elective	4-5
MA 114 Intro. to Finite Math Appl.	3-4	Humanities/Soc. Sci. Elective**	3
PE 100 Health & Physical Fitness	1	Physical Science Elective	1
RRA 101 Rec. Res. Orientation Lab	1		17-18
Free Elective	3		
	15-16		

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
EB 201 Economics I or		SOC 301 Human Behavior or	
EB 212 Economics of Agri.	3	PSY 376 Human Growth & Dev.	3
RRA 215 Maintenance & Operations I	3	RRA 216 Maintenance & Operations II	3
SOC 202 Principles of Sociology or		ST 311 Introduction to Statistics	3
PSY 200 Intro. to Psychology	3	Concentration*	3
Computer Elective	3	Fine Arts Elective	3
English Writing Elective	3	Physical Education Elective	1
Physical Education Elective	1		16
	16		

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
RRA 350 Outdoor Recreation Management	3	BO (ZO) 360 and 365 Intro. to Ecology	4
RRA 358 The Recreation Program	4	RRA 359 Leadership Supervision in Rec.	3
Concentration*	6	RRA 451 Facility & Site Planning	3
Environ. Ethics Elective	3	Concentration*	3
	16	Free Elective	3
			16

SUMMER SESSION

(9 weeks)

RRA 475 Recreation and Park Internship	9
---	---

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
RRA 438 Recreation for Special Pop.	3	RRA 454 Recreation & Park Finance	3
RRA 453 Admin. Policies & Procedures	3	RRA 480 Rec. Analysis Evaluation	3
Concentration*	6	Concentration*	3
Fine Arts Elective	3	Free Elective	6
Free Elective	3		15
	15		

Minimum Hours Required for Graduation ... 135

*Of the 18 hours in the various concentration areas, 9 to 12 hours are required specifically for the selected concentration and 9 to 15 hours are elected from controlled areas.

MINOR IN RECREATION RESOURCES ADMINISTRATION

The academic minor in Recreation Resources Administration is offered to students interested in gaining a basic knowledge of the parks and recreation field and an understanding of the importance of leisure and recreation in American society. It is not intended to prepare students for a professional career in parks and recreation. Seven hours of required courses and nine hours of electives are necessary to complete the minor. The program provides a background in recreation and park management which is useful to students who will 1) assume full-time careers that are associated with recreation and park services (in such fields as landscape architecture, public administration, and forestry) and 2) become involved in the park and recreation field as a volunteer program leader or policy making board member with such organizations as the Scouts, Ys, N.C. Senior Games, art advisory councils, and conservation organizations.

WOOD AND PAPER SCIENCE

Biltmore Hall (Room 1022)

Professor R. J. Thomas, Head of the Department

Professors: A. C. Barefoot, H.-M. Chang, R. H. Cornell, E. B. Cowling, E. L. Elwood, I. S. Goldstein, J. S. Gratzl, C. A. Hart, R. G. Hitchings, T. W. Joyce, M. W. Kelly, M. P. Levi, H. G. Olf, R. G. Pearson, E. A. Wheeler; *Adjunct Professors:* R. J. Demartini, L. L. Edwards, T. K. Kirk, S. Y. Lin, W. T. McKean, R. P. Singh; *Associate Professors:* R. C. Allison, E. L. Deal, R. C. Gilmore, S. J. Hanover; *Adjunct Associate Professor:* R. B. Phillips; *Associate Professors Emeriti:* L. H. Hobbs, C. G. Landes, C. N. Rogers; *Assistant Professors:* J. Denig, L. G. Jahn; *Adjunct Assistant Professor:* A. G. Raymond, Jr.; *Assistant Professor Emeritus:* H. D. Cook; *Instructor:* A. G. Kirkman; *Research Associates:* C.-L. Chen, N. C. Weidhaas; *Research Assistant:* W. S. Bryan; *Associate Members of the Faculty:* R. D. Gilbert (Textile Chemistry), A. E. Hassan (Forestry), H. B. Moore (Entomology), A. L. Prak (Industrial Engineering), J. P. Roise (Forestry), V. T. Stannett (Chemical Engineering), D. H. J. Steensen (Forestry).

The wood-based industry of North Carolina, as well as throughout the South, is a vital part of the nation's economy. In terms of the dollar value of shipments of wood products, the South leads all regions of the country. North Carolina manufactures more wood household furniture than any other state, ranks third in shipment value for all wood-based products and second in number of employees and wages paid. Thus, many opportunities exist in North Carolina and other southern states for careers in the wood-based industry.

The Department of Wood and Paper Science offers two curricula leading to Bachelor of Science degrees—(1) Pulp and Paper Science and Technology, and (2) Wood Science and Technology. Both curricula prepare young men and women for careers in the wood-based and allied industries or in government agencies connected with wood resources.

PULP AND PAPER SCIENCE AND TECHNOLOGY

Reuben B. Robertson Professor R. G. Hitchings, In Charge

The Pulp and Paper Science and Technology curriculum prepares students for careers in pulp and paper, an industry that ranks as the fifth largest manufacturing industry in the United States. Science, engineering, and mathematics form the basis for a multidisciplinary approach to understanding the fundamental manufacturing principles involved. Students study wood pulping processes, chemical and by-product recovery systems, and pulp bleaching. In addition, various paper-making operations such as refining, sizing, coating, and drying are studied.

Three concentrations are available emphasizing the technological, scientific, or engineering aspects of pulping and papermaking. The Technology Concentration provides a broad background for those students anticipating careers in mill operations or with paper industry supplier organizations. Greater depth in the underlying scientific principles or their applications can be obtained from the Science Concentration or the Chemical Engineering Concentration, either of which provides a good foundation for graduate study. Students who have completed the Chemical Engineering Concentration in pulp and paper science and technology can, in cooperation with the School of Engineering and an additional semester of study, earn a Bachelor of Science in Chemical Engineering as a second degree.

OPPORTUNITIES

Graduates of this curriculum find opportunities for challenging careers as process engineers, product development engineers, process control chemists, technical service engineers, quality control supervisors, and production supervisors. Design and construction engineering companies use graduates as project engineers, and pulp and paper machinery companies use their education and skills for technical service and sales positions. In many instances opportunities for managerial and executive positions are available to graduates as they gain experience.

SUMMER INTERNSHIP

All pulp and paper majors spend at least one summer working in a pulp or paper mill. One hour of academic credit is granted after completion of 12 weeks of mill work and presentation of a satisfactory report. In addition, students are urged to work in mills the other two summers, as the work provides valuable practical experience. Departmental advisors assist students in locating summer work.

REGIONAL PROGRAM

The pulp and paper curriculum is a regional program approved by the Southern Regional Education Board as the undergraduate program to serve the Southeast in this field.

SCHOLARSHIPS

Approximately 70 undergraduate academic scholarships are granted annually to new and continuing students by more than 100 companies comprising the Pulp and Paper Foundation.

TECHNOLOGY CONCENTRATION

PULP AND PAPER SCIENCE AND TECHNOLOGY CURRICULUM

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry I	4	CH 107 Principles of Chemistry	4
ENG 111 Composition and Rhetoric	3	ENG 112 Composition and Reading	3
MA 102 Analytic Geometry & Calc. I	4	GC 101 Engineering Graphics I	2
PE 100 Health & Physical Fitness	1	MA 201 Analytic Geometry & Calc. II	4
WPS 101 Intro. to Wood and Paper Science	1	WPS 102 Intro. to Pulp & Paper	
Humanities/Soc. Sci. Elective**	3	Sci. & Tech.	1
	16	Humanities/Soc. Sci. Elective**	3
		Physical Education Elective	1
			18

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 221 Organic Chemistry I	4	CH 223 Organic Chemistry II	4
MA 202 Analytic Geometry & Calc. III	4	CHE 205 Chemical Process Princ.	4
PY 205 General Physics	4	PY 208 General Physics	4
Humanities/Soc. Sci. Elective**	3	WPS 242 Wood Fiber Analysis	2
Physical Education Elective	1	Humanities/Soc. Sci. Elective*	3
	16	Physical Education Elective	1
			18

SUMMER SESSION

WPS 211 Pulp and Paper Internship	1
---	---

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 315 Quantitative Analysis	4	ENG 321 Communicating Tech. Inform.	3
CH 331 Intro. Physical Chemistry	4	WPS 322 Pulp & Paper Technology II	3
WPS 321 Pulp & Paper Technology I	3	WPS 332 Wood and Pulp Chemistry	4
Humanities/Soc. Sci. Elective**	3	WPS 355 Pulp & Paper Unit Proc. I	3
Technical Elective	3	Free Elective	3
	17		16

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
WPS 360 Pulp & Paper Unit Processes II	3	WPS 403 Paper Process Analysis	3
WPS 413 Paper Properties & Additives	4	WPS 410 Systems Analysis & Ctrl.	3
WPS 415 Proj. Mgt. & Control I	2	WPS 416 Proj. Mgmt. & Control II	2
WPS 471 Pulping Process Analysis	3	WPS 463 Plant Inspections	1
Technical Elective	3	Humanities/Soc. Sci. Elective**	3
Free Elective	3	Free Elective	3
	<u>18</u>		<u>15</u>

Minimum Hours Required for Graduation ... 135

*Basic economics course recommended.

**See approved list: 6 hours each must be taken in both humanities and social science courses. The remaining 6 hours may be taken in either humanities or social science.

SCIENCE CONCENTRATION PULP AND PAPER SCIENCE AND TECHNOLOGY CURRICULUM

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry I	4	CH 107 Principles of Chemistry	4
ENG 111 Composition & Rhetoric	3	ENG 112 Composition & Reading	3
MA 102 Analytic Geometry & Calculus I	4	GC 101 Engineering Graphics I	2
PE 100 Health & Physical Fitness	1	MA 201 Analytic Geometry & Calculus II	4
WPS 101 Intro. to Wood and Paper Science	1	WPS 102 Intro. to Wood & Paper Science	1
Humanities/Soc. Sci. Elective*	3	Free Elective	3
	<u>16</u>	Physical Education Elective	1
			<u>18</u>

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 221 Organic Chemistry I	4	CH 223 Organic Chemistry II	4
MA 202 Analytic Geometry & Calculus III	4	MA 301 Applied Diff. Equations I	3
PY 205 General Physics	4	PY 208 General Physics	4
Humanities/Soc. Sci. Elective**	3	WPS 242 Wood Fiber Analysis	2
Physical Education Elective	1	Humanities/Soc. Sci. Elective**	3
	<u>16</u>	Physical Education Elective	1
			<u>17</u>

SUMMER SESSION

WPS 211 Pulp and Paper Internship 1

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 315 Quantitative Analysis	4	CH 433 Physical Chemistry II	3
CH 431 Physical Chemistry I	3	ENG 321 Communicating Tech. Info.	3
ST 361 Intro. to Statistics for Engineers	3	WPS 322 Pulp and Paper Technology II	3
WPS 321 Pulp and Paper Technology I	3	WPS 332 Wood & Pulping Chemistry	4
Free Elective	3	Technical Electives	3
	<u>16</u>		<u>16</u>

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
WPS 413 Paper Prop. and Additives	4	WPS 403 Paper Process Analysis	3
WPS 471 Pulping Process Analysis	3	WPS 463 Plant Inspections	1
Humanities/Soc. Sci. Electives**	6	Humanities/Soc. Sci. Elective**	3
Technical Electives	6	Technical Electives	6
	<u>19</u>	Free Elective	3
			<u>16</u>

Minimum Hours Required for Graduation ... 135

*Basic economics course recommended.

**See approved list: 6 hours each must be taken in humanities and in social science courses. The remaining 6 hours may be taken in either humanities or social science.

CHEMICAL ENGINEERING CONCENTRATION PULP AND PAPER SCIENCE AND TECHNOLOGY CURRICULUM

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry I	4	CH 107 Principles of Chemistry	4
ENG 111 Composition and Rhetoric	3	ENG 112 Composition and Reading	3
MA 102 Analytic Geometry & Calc. I	4	GC 101 Engineering Graphics I	2
PE 100 Health & Physical Fitness	1	MA 201 Analytic Geometry & Calc. II	4
WPS 101 Intro. to Wood and Paper Sci.	1	WPS 102 Intro. to Pulp & Paper	
Humanities/Soc. Sci. Elective*	3	Science & Technology	1
	16	Physical Education Elective	1
			15

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 221 Organic Chemistry I	4	CH 223 Organic Chemistry II	4
CHE 205 Chemical Process Principles	4	CHE 225 Chemical Process Systems	3
MA 202 Analytic Geometry & Calc. III	4	MA 301 Applied Diff. Equations I	3
PY 205 General Physics	4	PY 208 General Physics	4
Physical Education Elective	1	WPS 242 Wood Fiber Analysis	2
	17	Physical Education Elective	1
			17

SUMMER

WPS 211s Pulp and Paper Internship	1
--	---

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CHE 311 Transport Processes I	3	CH 437 Physical Chemistry E	3
CHE 315 Chem. Proc. Thermodynamics	3	CHE 312 Transport Processes II	3
MAT 201 Struct. & Prop. of Engr. Matr'ls.	3	CHE 316 Thermodynamics of Chemical and	
WPS 321 Pulp & Paper Technology I	3	Phase Equilibria	3
Humanities/Soc. Sci. Electives	6	WPS 322 Pulp & Paper Technology II	3
	18	WPS 332 Wood and Pulping Chemistry	4
			16

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CHE 330 Chemical Engineering Lab I	2	ECE 331 Prin. of Electrical Engr. or	
WPS 360 Pulp & Paper Unit Processes II	3	CHE 425 Proc. System Analysis & Ctrl.	3
WPS 413 Paper Properties & Additives	4	WPS 403 Paper Process Analysis	3
WPS 415 Proj. Mgmt. & Control I	2	WPS 410 System Analysis & Control	3
WPS 471 Pulping Process Analysis	3	WPS 416 Proj. Mgmt. & Control II	2
Humanities/Soc. Sci. Elective*	3	WPS 463 Plant Inspections	1
	17	Humanities/Soc. Sci. Elective*	6
			18

Minimum Hours Required for Graduation ... 135

*See approved list: 6 hours must be taken from humanities, 6 hours must be taken from social science and the remaining 6 hours may be taken from either humanities or social science.

Note: To complete the requirements for a B.S. in CHE students will need CHE 421, CHE 425 and CHE 446.

WOOD SCIENCE AND TECHNOLOGY

Professor M. W. Kelly, In Charge

Wood science and technology is an applied science of an interdisciplinary nature. Thus knowledge of the natural sciences, mathematics, engineering, and economics is the basis for understanding wood and its processing into products. It is primarily a materials science curriculum, but also involves industrial manufacturing and management. A wood technologist performs many engineering oriented functions; but, unlike the engineer, he has a

thorough knowledge of wood as a raw material. This knowledge is essential for properly applying engineering concepts to wood processing.

As non-renewable resources diminish and their cost of procurement increases, the demand for wood, a renewable resource, increases. As a result, a substantial increase in career opportunities for individuals with a wood science and technology education is occurring.

The Wood Science and Technology curriculum at North Carolina State University prepares graduates for production supervisor, staff positions and management responsibilities in all types and sizes of wood industries. Elective courses give the student an opportunity to specialize in science courses as a wood scientist, in engineering courses as a wood engineer, in business, economics and administration as a manager, or in other concentration areas.

If desired, course selection also provides concentration for specific industries such as veneer and plywood, furniture and home furnishings, architectural woodwork and fixtures, lumber and dimension parts, composite boards and treated products, and such allied industries as adhesives, coatings and machinery.

At the end of the sophomore year, students attend a five-weeks wood products practicum in the Brandon P. Hodges Wood Products Laboratory. From drawings and bills of materials, they process a cutting order from lumber to a finished article of furniture. Students set up and operate all machines, make particleboard and plywood, test glued joints for strength, and apply the finish to the nightstand.

Following the practicum, students undertake an internship in wood or allied industries and gain valuable practical industrial experience. Both the practicum and the work experience enhance the student's understanding of the business and production aspects of a wood industry.

OPPORTUNITIES

Careers include industrial positions with both large and small companies manufacturing lumber, veneer, plywood, particle- and fiberboards, and consumer wood products such as furniture. Wood technologists are also in demand by suppliers to wood manufacturing industries, such as chemical and machinery companies. Opportunities are also available with state and federal government in research, marketing, or extension activities.

SCHOLARSHIPS

Approximately ten undergraduate academic scholarships are granted annually to new and continuing students through the Forestry Foundation.

FIELDS OF SPECIALIZATION

The program provides a minimum of 18 credit hours for developing a concentration area outside of the department. The student may develop an area of concentration applicable to the field of wood science and technology. Concentrations are available in: a) business, b) quantitative analysis, c) biology and bio-chemistry, d) chemistry, e) harvesting operations, f) civil, mechanical or industrial engineering, and g) furniture manufacturing. Concentrations other than those listed may be arranged.

DUAL DEGREE PROGRAM

Dual degree programs are available whereby students can obtain, in addition to a Bachelor of Science in wood science and technology, a second Bachelor of Science degree in either economics and business, industrial engineering, or forestry. Credits beyond those required for the single degree program are necessary and can be earned with an additional year of study.

CURRICULUM IN WOOD SCIENCE AND TECHNOLOGY

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
BS 100 General Biology or		CH 101 General Chemistry	4
BO 200 Plant Life	4	ENG 112 Composition & Reading	3
ENG 111 Composition & Rhetoric	3	GC 101 Engineering Graphic I	2
MA 112 Analytic Geometry & Calc. A*	4	MA 212 Analytic Geometry & Calc. B*	3
PE 100 Health & Physical Fitness	1	WPS 202 Wood Struct. & Prop. I	3
WPS 101 Intro. to Wood & Paper Sci.	1	Physical Education Elective	1
Humanities/Soc. Sci. Elective**	3		16
	16		

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 103 General Chemistry II	4	WPS 203 Wood Struct. & Prop. II	4
PY 221 College Physics	5	WPS 273 Quan. Meth. in Forest Res.	3
WPS 220 Wood Protection	3	Free Elective	3
Humanities/Soc. Sci. Elective**	3	Humanities/Soc. Sci. Elective**	6
Physical Education Elective	1	Physical Education Elective	1
	16		17

SUMMER PRACTICUM

WPS 205 Wood Products Practicum	5
WPS 210 Forest Products Internship	1
	6

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ENG 321 Communicating Tech. Info.	3	WPS 302 Wood Processing II	3
ST 361 Statistics for Engr.	3	WPS 316 Wood-Polymer Principles	3
WPS 301 Wood Processing I	3	WPS 344 Intro. to Qual. Control	3
WPS 315 Intro. to Wood-Polymer Prin.	3	WPS 350 Wood Tech. Literature	1
Concentration Elective	3	Concentration Electives	6
	15		16

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
WPS 434 Mgmt. Dec. Making in For. & Wood Prod.	3	WPS 442 Wood Mechanics & Design	3
WPS 441 Intro. to Wood Mechanics	3	WPS 450 Wood Ind. Case Studies	2
WPS 491 Senior Problems	2	Concentration Electives	6
Concentration Electives	3	Humanities/Soc. Sci. Elective**	3
Humanities/Soc. Sci. Elective**	3	Free Elective	3
Free Elective	3		17
	17		

Minimum Hours Required for Graduation 136

(For students in optional Honors Program 137)

*Students with appropriate mathematical aptitude and interest are encouraged to substitute MA 102, MA 201 and MA 202 for the mathematical sequence listed.

**To include 6 hours of traditional humanities courses and 6 hours of social science courses.

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

- Link Building (Room 106)
- W. B. Toole, III, *Dean*
- M. M. Sawhney, *Associate Dean*
- G. D. Garson, *Associate Dean for Planning and Management*
- E. D. Sylla, *Assistant Dean for Research and Graduate Programs*
- W. C. Fitzgerald, *Assistant to the Dean*
- H. G. Kebschull, *Assistant to the Dean for International Studies*
- L. S. Malami, *Coordinator of Cooperative Education*
- L. H. Hambourger, *Coordinator of Advising for Evening Programs*
- J. S. Griffin, *Academic Coordinator for Minority Students*

The School of Humanities and Social Sciences offers programs of study which lead to baccalaureate and advanced degrees in the disciplines comprising the humanities and social sciences, and also offers courses in these areas which are part of the programs of all undergraduate students in the university. In this way the university provides an opportunity for its students to prepare for a full life in professions and occupations that require intellectual flexibility, broad knowledge, and a basic comprehension of human beings and their problems.

Nine departments are included in the School of Humanities and Social Sciences: Economics and Business (also a department in the School of Agriculture and Life Sciences), English, Foreign Languages and Literatures, History, Philosophy and Religion, Physical Education, Political Science and Public Administration, Sociology and Anthropology (also a department in the School of Agriculture and Life Sciences) and Speech-Communication. The Division of University Studies, an academic unit responsible for interdisciplinary programs, is also affiliated with this school. Undergraduate majors are offered in economics, accounting, business management, English, history, French, Spanish, philosophy, political science, sociology, social work, speech-communication, and multidisciplinary studies. In some departments special concentrations are available within the major programs: e.g., writing and editing (English), law and political philosophy (political science or philosophy), anthropology (sociology), religious studies (philosophy), criminal justice (political science or sociology) and international studies (any HSS major) and journalism (all HSS majors except those in the writing and editing option in English and in the telecommunications option in speech-communication). A teacher education option is available in English, French, Spanish, and social studies (history, political science, sociology). Degrees granted include the Bachelor of Arts, the Bachelor of Science, the Bachelor of Social Work, the Master of Arts, and the Doctor of Philosophy, as well as professional degrees in economics, political science, and sociology.

BACHELOR OF ARTS PROGRAM

FRESHMAN YEAR			
<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ENG 111 Composition & Rhetoric	3	ENG 112 Composition & Reading	3
PE 100 Health & Physical Fitness	1	History	3
History ¹	3	Mathematics	3-4
Mathematics ²	3-4	Philosophy ³	3
Foreign Language 201 (Intermediate) ³	3	Social Science	3
Social Science ⁴	3	Physical Education	1
	16-17		16-17

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
Literature ⁶	3	Literature	3
Natural Science	3-4	Natural Science	3-4
Social Science	3	Social Science	3
Electives	6	Elective	3
Physical Education	1	Area Elective	3
	<u>16-17</u>	Physical Education	<u>1</u>
			16-17

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
Major ⁹	9	Major	9
Electives	6	Electives	6
	<u>15</u>		<u>15</u>

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
Major	9	Major	6
Electives	6	Electives	9
	<u>15</u>		<u>15</u>

Minimum Hours Required for Graduation ... 124

¹ This two-semester requirement includes a course concerned with pre-industrial Western or non-Western societies (HI 207, 208, 209, 215, 216, 263, 264, 275, or 276), and another dealing with the United States or post-industrial Western societies (HI 205, 210, 221, 222, 233, 241, 242, 243, 244).

² Two semesters are required for economics and business or sociology majors (MA 112, 113, or 102 and 114 required for economics and business; MA 111-112 recommended for sociology but any two mathematics courses other than MA 115 allowed). For all other humanities and social science majors the requirement may be satisfied with any two mathematics courses other than MA 115 or one course other than MA 115 plus a course in computer science, statistics, or logic.

³ Proficiency is required at the first-semester intermediate level in French, Spanish, German, Russian, Italian, Latin, Greek, Biblical Hebrew, Japanese or Portuguese. Proficiency at the second-semester intermediate level in one of these languages is required for English, speech-communication, and foreign language majors.

⁴ The requirements call for twelve hours of social science representing at least three of the following disciplines: anthropology, economics, political science, psychology, sociology. At least nine of these hours must be outside the student's major field.

⁵ Three hours of philosophy, exclusive of logic (PHI 201, 335 and 402), are required.

⁶ This requirement may be satisfied with (1) any two of the following survey courses: ENG 261, ENG 262, ENG 265, ENG 266, FLS 301, FLS 302, FLF 301, FLF 302, FLS 304; (2) with ENG 251-252; (3) with ENG 251 plus any course listed in (1) except ENG 261-262; or (4) with ENG 252 plus any course listed in (1) except ENG 265-266.

⁷ The natural science requirement calls for a minimum of eight credit hours. At least one course must include a laboratory experience. Students must receive credit for at least one basic introductory course from physics, chemistry, geology, or the biological sciences. These courses include CH 101, CH 103, CH 107, CH 111; PY 205, PY 208, PY 211, PY 212, PY 221, and PY 231; MEA 101 with MEA 110; BS 100 or BS 105; BO 200. To complete the requirement, students may take any of the courses listed above, except that if BS 100 or BS 105 has been taken the other may not be taken for credit and that BO 200 may not be combined with either BS 100 or BS 105. Otherwise the requirement may be completed with any course in botany, chemistry (except CH 105), genetics, physics, zoology, or marine, earth, and atmospheric sciences (except MEA 120, 208, or 215), or with ENT 425.

⁸ One of the following courses outside the student's major is required: DN 141, DN 142; ENG 346, ENG 347, ENG 390; FL 495; FLF 350, FLF 352, FLF 492; FLR 303, FLR 304; GRK 310, GRK 320; HA 201, HA 202, HA 203, HA 298, HA 401, HA 402; MUS 200, MUS 210, MUS 215, MUS 220, MUS 230, MUS 240, MUS 301, MUS 320; any religion course except Hebrew language courses; SP 103, SP 213, SP 321, SP 411.

⁹ Major requirements for the Bachelor of Arts range from 30-45 hours. Most of the major programs call for 30 hours of work above the basic courses in a discipline.

BACHELOR OF SCIENCE PROGRAM

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry I	4	CH 107 Principles of Chemistry or	
ENG 111 Composition & Rhetoric	3	CH 103 General Chemistry II	4
PE 100 Health & Physical Fitness	1	ENG 112 Composition & Reading	3
Humanities/Soc. Sci. Elective	3	Mathematics ¹	3-4
Mathematics	4	Humanities/Soc. Sci. Elective ²	3
	<u>15</u>	Physical Education Elective	1
			<u>14-15</u>

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
Course I-Major	3	Course II-Major	3
Eng Lit/Foreign Language ³	3	Foreign Languages/English Literature	3
Mathematics	3-4	Humanities/Soc. Sci. Elective ²	3
PY 205 or 211 General Physics I	4	Mathematics	3
Philosophy ⁴	3	PY 208 or 212 General Physics II	4
Physical Education Elective	1	Physical Education Elective	1
	17-18		17

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
BS 100 General Biology	4	ZO 201 General Zoology or	
Course I Option ⁵	3	BO 200 Plant Life	4
Course III-Major	3	Course II-Option ⁵	3
History or Philosophy of Science ⁶	3	Course IV-Major	3
Humanities/Soc. Sci. Elective ²	3	Course V-Major	3
	16	Elective	3
			16

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
Course III-Option ⁵	3	Course V-Option ⁵	3
Course IV-Option ⁵	3	Course VIII-Major	3
Course VI-Major	3	Course IX-Major	3
Course VII-Major	3	Electives	6
Elective	3		15
	15		

Minimum Hours Required for Graduation .. 127

¹Four courses are required, including either the sequence MA 102, 201, 202 or MA 112, 212. The remaining course(s) are to be chosen from MA 114, 214, 301, 303, and 405.

²Twelve hours in humanities and/or social sciences outside the major discipline are required.

³Six hours of foreign language and/or English literature at the 200 level or above are required.

⁴Any course in philosophy, excluding logic (PHI 201, 335, 402) and philosophy of science (PHI 340, 341).

⁵A 15 hour concentration is required in a mathematics, science, or engineering discipline.

⁶A course in the history or philosophy of science or mathematics to be chosen from a specified list of alternatives.

HONORS PROGRAM

Each of the degree-granting departments in the School of Humanities and Social Sciences has an honors program designed to encourage outstanding students to develop their intellectual potential to the fullest extent possible through individualized study, special seminars, and close association with faculty members in their major field. The school also, in conjunction with the Division of Student Affairs, sponsors a residential Scholars of the College Program for students who show exceptional academic promise. The participants take special sections of freshman and sophomore level courses and a series of cultural events and special projects before undertaking specialized honors work in their major. In their junior year they enroll in two interdisciplinary, team-taught classes.

SCHOLARSHIPS

In addition to the university-wide awards available, the following scholarships are offered to entering freshmen:

Nathaniel C. Browder Scholarship (\$1000)

Bess B. and Lynton Yates Balentine Scholarship (\$1000)

American Defender Life Scholarship (\$1000)

Humanities and Social Sciences Merit Scholarship (\$1000)

Claire Simmons Allan-Sampson Memorial Scholarship in Moral Philosophy (\$1000).

Thomas Jefferson Scholarship in Agriculture and the Humanities (full tuition and fee).

For further information, write:
Dr. John Wall
Director, Scholars of the College Program
North Carolina State University
P. O. Box 8105
Raleigh, N. C. 27695-8105

CONCENTRATION IN INTERNATIONAL STUDIES

In recognition of the increasing need to understand the complexities of an interdependent world, the School of Humanities and Social Sciences offers a concentration in International Studies to students interested in focusing upon international affairs. This concentration is offered in conjunction with a departmental major, the requirements of which must also be met by a student electing the concentration.

The concentration is designed to enhance the student's understanding of the contemporary world, its resources and its problems, thereby enabling the student to be a more effective participant in world affairs. It consists of three integrated Seminars in International Affairs, demonstrated competencies in a modern foreign language, and a minimum of five courses focusing upon a particular geographical area of the world or upon a particular international issue or set of issues. Each student's program will be individually designed in consultation with the student's departmental advisor, subject to the approval of the Committee on International Studies, the Assistant to the Dean for International Studies, and the Dean of the School of Humanities and Social Sciences.

CONCENTRATION IN JOURNALISM

A journalism concentration is offered by the departments of English and Speech Communication for all Humanities and Social Science students, *except English majors in the writing-editing option or Speech Communication majors with a telecommunications emphasis*, interested in developing skills in writing for the print and electronic media in addition to majoring in their specific field of study. The concentration requires completion of 12 hours of core courses, one elective course, and a departmental major. The program provides basic preparation for careers requiring written communication, such as those in newspaper and magazine writing, radio, television, public relations, corporate communications, and marketing.

PRE-LAW PROGRAM

Law schools neither prescribe nor recommend a particular undergraduate curriculum for prospective candidates. The Association of American Law Schools has, however, recommended an undergraduate education of the broadest possible scope as the best means of developing the communicative, critical, and creative skills and abilities fundamental to success in legal studies and practice. A student may prepare for post-graduate work in law in any of the majors offered by the eight degree-granting departments in the School of Humanities and Social Sciences, each of which has a special advisor to help pre-law students with the selection of appropriate electives and concentrations. Alternatively, the student may apply for admission to Multidisciplinary Studies during the sophomore year and, in consultation with an advisor, design a pre-law major involving two or more academic areas.

All interested entering freshmen are invited to attend a special orientation session for pre-law students. These students are also invited to join the Pre-law Student Association, an undergraduate organization that provides pre-law students with information concerning preparation for the law school admission test (LSAT) as well as the study and practice of law through guest speakers, discussion sessions, and other activities.

COOPERATIVE EDUCATION

Cooperative Education in Humanities and Social Sciences seeks to broaden the student's intellectual horizons and at the same time to provide an introduction to the world of business, industry, government, or finance in preparation for a career after graduation. In

this program the freshman and senior years are usually spent on campus while the sophomore and junior years are devoted either to alternate periods of on-campus study and off-campus work or to a parallel arrangement of part-time work and part-time study on a continuous basis. The student is paid for work experiences by the employer. Ordinarily the program takes five years to complete, but those who are willing to attend summer school or take on a summer co-op assignment can finish in four years. Transfer students are eligible and all interested students are urged to apply early in the academic year. The program is also open to graduate students although less time is required on work assignment.

Further information may be obtained from L. S. Malami, Coordinator of Cooperative Education, M-5 Link Building (737-2199).

JEFFERSON SCHOLARS IN AGRICULTURE AND THE HUMANITIES

(See also School of Agriculture and Life Sciences)

The Thomas Jefferson Scholars Program in Agriculture and the Humanities is a joint program of the School of Humanities and Social Sciences and the School of Agriculture and Life Sciences. It is a double degree program which permits participants to have two concentrations: one in an area of agriculture, such as agronomy, animal science, food science, or horticulture, and one in an area of humanities/social sciences, such as business management, public policy, international studies, or general humanities. The double degree program may be individually designed to meet each student's particular interests and career goals. The purpose of the program is to produce potential leaders in agriculture who have not only technical expertise but also an appreciation for the social, political, and cultural issues that effect decision-making.

Each spring a number of entering freshmen are chosen to receive scholarships to participate in the Jefferson program. In addition, other qualified students may choose to pursue a double major in agriculture and the humanities under the Jefferson program.

Students interested in applying to the Jefferson Scholars program should contact: Office of the Dean, School of Humanities and Social Sciences, Box 8101, North Carolina State University, Raleigh, NC 27695-8101, or the Office of the Associate Dean, School of Agriculture and Life Sciences, Box 7601, before January 15.

For more information, contact the program coordinator, Martha W. Moore, (111 Patterson Hall, 737-3249) or Lynda Hambourger, Assistant to the Dean, Humanities and Social Sciences (106 Link Building, 737-2467).

JOINT HUMANITIES AND SOCIAL SCIENCES-ENGINEERING PROGRAM

Some students may want to combine a Bachelor of Science in Engineering with either a Bachelor of Science or Bachelor of Arts in Humanities and Social Sciences. When the two are carried along together, the double degree program can be completed in five years. Those interested should contact the School of Engineering Assistant Dean for Undergraduate Programs and the Associate Dean of Humanities and Social Sciences.

FOLGER INSTITUTE

North Carolina State University is a member of the Folger Institute of Renaissance and Eighteenth-Century Studies, a unique collaborative enterprise sponsored by the Folger Shakespeare Library in Washington, D.C., and twenty universities in the Middle Atlantic region. Each year the institute offers an interdisciplinary program in the humanities-seminars, workshops, symposia, colloquia, and lectures. Admission is open to faculty and students of North Carolina State University, and a limited number of fellowships are available through the campus Folger Institute Committee.

ECONOMICS AND BUSINESS

Patterson Hall (Room 202)

Professor D. M. Hoover, Head of the Department

Professor E. W. Erickson, Director for Center for Economics and Business Studies

Associate Professor R. E. Sylla, Associate Head for Economics and Business

Associate Professor M. B. McElroy, Assistant Head and Graduate Programs Administrator

Professor C. J. Messere, Associate Head for Accounting and Business Law

Professor C. L. Moore, Associate Head and Extension Specialist-in-Charge

Professor R. K. Perrin, Associate Head for Agricultural Research and Teaching

Lecturer B. L. Puryear Coordinator of Advising

Professors: G. A. Carlson, R. L. Clark, A. J. Coutu, R. D. Dahle, L. E. Danielson, J. E. Easley, Jr., W. D. Eickoff, R. M. Fearn, Douglas Fisher, A. R. Gallant, D. M. Holthausen, D. N. Hyman, L. A. Ihnen, P. R. Johnson, Thomas Johnson, C. P. Jones, R. A. King, C. Knoeber, H. L. Liner, D. F. Neuman, E. C. Pasour, Jr., R. J. Peeler, Jr., R. A. Schrimper, J. J. Seater, R. E. Sylla, C. B. Turner, W. L. Turner, R. C. Wells; *Professors Emeriti:* A. J. Bartley, R. C. Brooks, D. R. Dixon, D. G. Harwood, T. E. Nichols, B. M. Olsen, C. R. Pugh, J. A. Seagraves, R. L. Simmons, J. G. Sutherland (USDA), C. R. Weathers, J. C. Williamson, Jr.; *Associate Professors:* S. G. Allen, D. S. Ball, D. Baumer, G. A. Benson, J. C. Dutton, E. Estes, D. J. Flath, Kay Frazier, H. C. Gilliam, Jr. (USDA), T. J. Grennes, J. D. Hess, S. Liebowitz, S. Margolis, R. B. Palmquist, D. Pearce, J. C. Poindexter, Jr., J. Rockness, R. Rossana, C. D. Safley, P. S. Stone, D. A. Sumner, M. L. Walden, W. J. Eisek, P. Williams, J. W. Wilson, M. Wohlegent, G. J. Zuckerman; *Associate Professors Emeriti:* J. G. Allgood, R. S. Boal, C. W. Harrell, H. A. Homme, D. D. Robinson; *Assistant Professors:* R. N. Collender, M. J. Courchane, E. Cox, L. Ferreri, N. M. Garren, E. Gerstner, A. Hall, S. A. Hatchett, A. Headen, D. L. Hoag, P. Kupiec, J. W. Levedahl, A. McDermed, J. McKee, K. Mitchell, C. M. Newmark, R. R. Rucker, J. E. Standaert, W. N. Thurman, K. D. Zering; *Assistant Professors Emeriti:* J. C. Matthews, Jr., E. M. Stallings, O. G. Thompson; *Lecturers:* C. G. Allen, S. Alvis, A. M. Beals, Jr., E. H. Brooks, E. Carraway, M. E. Fisher, T. Goodwin, H. O. Griffin, J. P. Huggard, R. L. Peace, C. J. Skender, L. B. Thorne; *Extension Specialists:* S. R. Sutter, R. H. Usry; *Associate Member of the Faculty:* R. H. Bernhard (Industrial Engineering).

Students interested in a rigorous and analytical course of study to prepare for careers in business, public and private accounting and government or for graduate study in economics, accounting, business or law should consider a major in the Department of Economics and Business. The department offers Bachelor of Arts degrees in accounting, business management and economics and a Bachelor of Science degree through the School of Humanities and Social Sciences. It also offers Bachelor of Science degrees in agricultural economics and agricultural business management through the School of Agriculture and Life Sciences. The department also offers a variety of Master's degrees, including a Master of Science in Management, and a Ph.D. in economics.

The department's degree programs in accounting and business management offer students an unusual opportunity to combine a technical business education with a firm foundation in the liberal arts and economics. The curricula are designed to prepare the student for a life-time of career development and growth. The liberal arts provide students with an understanding of the society and culture within which their career will develop. The economics, mathematics and statistics, together with accounting and business, courses provide the students with the technical skills to understand the business environment and to make sound business decisions. Coursework in the department is designed to give the student a broadly based introduction to economics, accounting and functional business areas and the application of these studies to particular areas of the economy and business practice.

FACILITIES

The department maintains microcomputer, mainframe computer access and library facilities to support its teaching programs and faculty research. The Microcomputer Instructional Laboratory consists of twenty IBM Personal Computers linked to printers and memory devices in a local area network. This laboratory is used as an integral part of instruction in some courses and for specific, independent assignments in others. The

Forrester Library contains major professional and business journals and certain government publications that are available to students for completing course assignments and for independent study. The Programming Applications Laboratory provides technically trained clerical and programming personnel to assist in the preparation of work for mainframe computing. Computer terminals to provide access to the mainframe are available in the department and throughout the campus. These mainframe computing facilities are available to advanced students.

The department maintains a program in which advanced accounting students provide tutorial assistance to beginning accounting students. Students are assigned an individual faculty advisor and, additionally, are provided group advising sessions issues important to all students are carefully presented. Career planning and placement assistance and workshops are available within the department on an individual basis and as part of the student group advising program. The department publishes a monthly newsletter for its majors called *Dollar Signs*, and a special newsletter of current issues for students in introductory economics courses.

OPPORTUNITIES

Economics and Business Management: Successful completion of an undergraduate degree in economics or business management prepares a student for careers in business or government and for advanced education. Graduates have been actively recruited by employers seeking individuals with management potential and a well-rounded business education. A wide range of career opportunities are available to students in either program including: finance and banking, marketing, sales, manufacturing and production, personnel management and public administration. Students from either program will have an excellent background for graduate work in economics, business, law and related fields.

Accounting: Accounting is an information system for measuring, processing, and communicating financial information about an identifiable economic entity. This information allows users to make reasoned choices among alternative uses of scarce resources in the conduct of business and economic activities.

Many career opportunities are available to accountants in the fields of public accounting, management accounting, governmental accounting, and not-for-profit accounting. Public accountants offer auditing, tax preparation and planning, management consulting, and other accounting services to their clients on a fee basis. Management or industrial accountants are employed by private businesses to provide internal accounting services for the firm. Their duties include the design and maintenance of the financial and cost accounting systems, product costing, budget preparation and operational auditing. Governmental units and other not-for-profit entities have informational needs similar to private businesses. Accountants employed by such entities perform many of the same functions. Accountants in some governmental agencies, such as the SEC, IRS and FBI, serve the dual function of auditing and law enforcement.

Certified public accountants (CPAs), certified management accountants (CMAs), certified internal auditors (CIAs) and certified cost analysts (CCAs) are individuals who, like doctors, dentists, and lawyers, are licensed to practice their profession. Such certifications are granted to those accountants who pass a qualifying examination and meet certain accounting experience and educational requirements.

ECONOMICS AND BUSINESS CURRICULA

All of the Bachelor of Arts degrees offered by the department require a common core of courses involving 24 semester hours. The core includes: EB 301 (microeconomics), EB 202 and 302 (macroeconomics), EB 350 (statistics), CSC 200 (computer science), and 9 semester hours of departmental electives. The departmental electives include any of the courses offered by the department or other courses approved by the Associate Department Head prior to being taken. (Additionally, students complete the introductory microeconomics course, EB 201, as part of their social science requirement.)

Beyond this common core of courses, students are required to take more specialized courses consistent with the title of their degree as outlined below.

A double major in business management and Spanish is also available.

BACHELOR OF ARTS IN ACCOUNTING

In addition to the school and departmental core requirements, the Bachelor of Arts degree in accounting includes 24 hours of accounting courses and a course in business law.¹

<i>Credits</i>	
ACC 210 (260) Accounting I	3
ACC 220 (261) Accounting II	3
ACC 310 (360) Intermediate Finan. Acct. I	3
ACC 311 (361) Intermediate Finan. Acct. II	3
ACC 320 (262) Managerial Uses of Cost Data	3
ACC 330 (364) Intro. to Income Taxation	3
ACC 410 (401) Advanced Financial Accounting	3
ACC 450 (466) Auditing Financial Information ² ..	3
EB 307 Business Law I	3
Core	24
	51
Minimum Hours Required for Graduation	124

¹To be eligible for a degree in accounting, at least 12 hours from the following required courses must be completed in residency at NCSU: ACC 310 (360), 311 (361), 330 (364), 410 (401), and 450 (466)². (Note: previous accounting course number equivalents are in parentheses.).

²Or another approved 400 level accounting course. Beyond these minimum requirements, students should plan (with the aid of their adviser) to complete additional course work to fulfill the requirements of their career objectives. For example, CPA candidates should take ACC 480 (362), 460, 430 (465), 470 (489) and EB 308. CMA candidates should take ACC 420 (362), 460, and 430 (465). The additional course work plan is flexible and depends upon the student's background and career orientation. Some of these courses may be required or suggested by various professional certifying boards. The additional courses can be included in the curriculum categories labeled either "departmental" or "free" electives. In some cases, the additional course work will require either an extra semester or summer school attendance (i.e., in addition to the minimum 124 semester hours required for graduation).

BACHELOR OF ARTS IN BUSINESS MANAGEMENT

In addition to the school and departmental core requirements, the Bachelor of Arts degree in Business Management includes two courses in accounting and one course in each of three areas: business law, marketing, and finance. Business management majors also complete a two course business concentration (see listing below) and two economics electives.

<i>Credits</i>	
ACC 210 (260) Accounting I	3
ACC 220 (261) Accounting II	3
EB 307 (or 306 or 405) Business Law I	3
EB 313 Marketing Methods	3
EB 420 Corporation Finance	3
Business Concentration ¹	6
Economics Electives ²	6
Core	24
	51
Minimum Hours Required for Graduation	124

¹Two courses are to be selected from ONE of the following groups: Finance—EB 404, 422; Managerial—EB 325, 425; Labor and Personnel—EB 326 or 332, and EB 431; Agricultural Business—EB 303, 311, 415, 430; Accounting—ACC 320 (262), and ACC 420 (362) or 330 (364).

²Two courses are to be selected from the following: EB 370, 371, 404, 410, 413, 430, 431, 433, 435, 436, 442, 448, 451, 470, 475, 490, and all 500 level EB courses.

BACHELOR OF ARTS IN ECONOMICS

In addition to the school and departmental core requirements, the Bachelor of Arts degree in economics includes an additional 12 semester hours of departmental electives and 15 additional hours of economics electives. This program requires that students take more advanced economics courses than is required in the other degree programs. These advanced courses are structured in an elective format to provide students the opportunity to design a program with the aid of their adviser that will best complement their educational or career objectives.

<i>Credits</i>	
Core	24
Departmental Electives ²	12
Economics Electives ¹	15
	51
Minimum Hours Required for Graduation	124

¹Courses are to be selected from the following: EB 370, 371, 404, 410, 413, 430, 431, 435, 436, 442, 448, 451, 470, 475, 490, and all 500 level EB courses.

²Any course offered by the Department of Economics and Business or other courses approved by the Associate Department Head, prior to being taken.

BACHELOR OF SCIENCE IN ECONOMICS

The Bachelor of Science degree in economics provides training in the analytical methods and the body of knowledge of economic theory. This training is enhanced by the mathematics, sciences, and technical option courses that are integral parts of the B.S. program.

Included in the economics program are 27 hours of prescribed and elected courses as outlined below:

	Credits		Credits
CSC 200 Intro. to Computers & their Uses	3	EB (ST) 350 Economics & Business Stat. ¹	3
EB 201 Economics I	3	Departmental Elective ³	3
EB 202 Economics II ¹	3	Economics Electives ²	6
EB 301 Intermediate Microeconomics	3		27
EB 302 Intermediate Macroeconomics	3		
		Minimum Hours Required for Graduation	127

¹ ST 361, or ST 371 and 372 may be substituted for EB 350, but only one of these courses or course sequences may be used to earn credit for graduation.

² Two courses are to be selected from the following: EB 370, 371, 404, 410, 413, 430, 431, 433, 435, 436, 442, 448, 451, 470, 475, 490, and all 500 level courses.

³ Any course offered by the Department of Economics and Business or other courses approved by the Associate Department Head, prior to being taken.

ELECTIVE COURSES

All of the degree programs contain a substantial amount of course work as outlined above that is flexible and can be selected by the student with the aid of his or her adviser. Courses are available in such fields as: accounting, business management, economics, agricultural economics, finance, business law, marketing, agricultural business, personnel, and production. (Courses offered are listed under "Accounting" and "Economics and Business" in the Course Description portion of this catalog).

DEPARTMENTAL RESIDENCY REQUIREMENT

To be eligible for a degree in the Department of Economics and Business, students must complete a minimum of 50 percent of the departmental course requirements above EB 201 (212) and 202 in residency at NCSU. Additional requirements may exist for specific degree programs within the department.

ENGLISH

- Tompkins Hall (Rooms 117, 131, 246)
- Professor J. E. Bassett, Head of the Department
- Associate Professor J. M. Grimwood, Associate Head of the Department
- Assistant Professor M. M. Brandt, Assistant Head for Scheduling
- Professor P. E. Blank, Coordinator of Advising

Professors: B. J. Baines, J. E. Bassett, P. E. Blank, Jr., L. S. Champion, J. D. Durant, M. Halperen, M. T. Hester, A. S. Knowles, L. H. MacKethan, W. E. Meyers, M. S. Reynolds, J. J. Smoot, A. F. Stein, W. B. Toole, III, M. C. Williams, R. V. Young, Jr.; Adjunct Professor: D. D. Short; Professors Emeriti: A. M. Fountain, H. G. Kincheloe, B. G. Koonce, R. P. Marshall, F. H. Moore, R. G. Walser, P. Williams, Jr.; Associate Professors: G. W. Barrax, L. J. Betts, Jr., E. D. Clark, J. W. Clark, Jr., J. B. Easley, E. D. Engel, J. Ferster, J. M. Grimwood, H. A. Hargrave, A. H. Harrison, L. T. Holley, K. F. Holloway, M. F. King, D. L. Laryea, V. B. Lentz, C. R. Miller, C. E. Moore, C. A. Prioli, L. S. Rudner, L. Smith, N. G. Smith, J. N. Wall, H. C. West; Associate Professors Emeriti: E. P. Dandridge, Jr., P. H. Davis, E. H. Paget, A. B. R. Shelley; Assistant Professors: M. M. Brandt, M. P. Carter, D. H. Covington, V. C. Downs, W. E. Haskin, C. G. Herndl, S. B. Katz, J. J. Kessel, L. A. Lomperis, D. C. Miller, J. O. Pettis, C. W. Pollard, N. B. Rich, D. B. Wyrick; Adjunct Assistant Professor: S. K. Burton; Lecturers: G. L. Barclay, L. K. Bartow, J. G. Brown, K. A. Burak, P. R. Cockshutt, D. DeWitt, H. E. Dickerson, L. T. Elliot, L. A. Fairman, B. A. Fennell, J. A. Fenton, J. M. Ginn, D. M. Graham, L. C. Grannan, A. Y. Gregory, M. D. Hardison, C. L. Hoppe, G. S. Horne, K. L. Huneycutt, J. R. Kidd, L. W. Killion, R. C. Kochersberger, M. P. Kuczynski, T. T. Leith, K. M. Majewski, T. P. McBride, K. F. Merris, J. R. Meyers, K. A. Olander, W. J. Owen, J. T. Palmer, B. C. Pittman, S. B. Pond, R. R. Radtke, M. L. Retchin, R. T. Roote, L. W. Rosser, R. J. Ruppel, B. G. Ruth, S. M. Setzer, L. R. Severin, A. K. Shaffran, L. C. Ward, M. C. Ward, G. R. Weinberg.

The Department of English offers basic and advanced courses in writing, language, and literature. The freshman courses, taken by all undergraduate students, develop skill in expository writing and in analytical reading of literary and non-literary works. Advanced courses in communication of technical information, composition and rhetoric, and creative writing give students opportunities to pursue special personal and career interests, as do courses in literature, linguistics, film, and folklore. The department offers a Bachelor of Arts major in English with three options—literature and language, writing and editing, and teacher certification—and a Bachelor of Science major. See listing of graduate degrees offered.

A certificate in professional writing is available to students not seeking the bachelor's degree. Also available are a minor in English, a minor in Comparative Literature (offered jointly with the Department of Foreign Languages and Literatures), and a concentration in Journalism (offered jointly with the Department of Speech Communication). An internship program combines work experience with courses in writing and editing.

OPPORTUNITIES

A degree in English provides both vocational training and liberal education. It leads to careers in such fields as teaching, journalism, advertising, public relations, personnel management, technical writing, business writing, and creative writing. It sharpens the analytical and interpretive skills needed for strong business management, and it serves as an excellent pre-professional degree for students planning to study law or medicine and for those intending to do graduate work in literature and composition.

BACHELOR OF ARTS IN ENGLISH

Major in English—The student must schedule 36 semester hours beyond the usual six hours in freshman composition. Basic requirements include the sophomore survey of English literature, the sophomore survey of American literature and a course in Shakespeare. Beyond these courses, the student may pursue special interests within the limits of recommended categories.

Major in English, Writing and Editing Option—The student must schedule 36 semester hours beyond the usual six hours in freshman composition. Courses include journalism, copyediting, advanced writing, literature, and, in the final semester, a seminar in writing-editing (ENG 495). Additionally the student must schedule 15-18 semester hours in a chosen track or discipline outside the department.

Major in English, Teacher Education Option—English majors may enroll in the teacher education option offered by the School of Humanities and Social Sciences in cooperation with the School of Education. Students who complete this program are eligible to apply for certification to teach English in secondary schools in North Carolina. The requirements of the program include 28 semester hours in professional courses and 36 semester hours in English beyond the usual six hours in freshman composition. (Total 124 credit hours required for graduation.) Students desiring to enter this program should declare their intention before the spring of the sophomore year and are required to file a formal application for admission which must be approved in order for them to participate.

BACHELOR OF SCIENCE IN ENGLISH

Concentration in English—The student, in consultation with his or her department adviser, must schedule 27 semester hours beyond the usual six hours in freshman composition.

MINOR IN ENGLISH

The English Department offers a minor in English to majors in any field except English. To complete the minor fifteen hours of English courses are required above the 100 level, six hours of which must be at the 300 level or above. A grade of C or better is required in all courses credited to the English minor.

FOREIGN LANGUAGES AND LITERATURES

1911 Building (Room 120)

Professor J. H. Stewart, Head of the Department

Associate Professor L. L. Cofresi, Assistant Head of the Department and Coordinator of Advising

Professor G. G. Smith, Scheduling Officer

Professors: T. P. Feeny, A. A. Gonzalez, J. R. Kelly, M. Paschal, E. M. Stack; Professor Emeritus: G. W. Poland; Associate Professors: R. A. Alder, S. T. Alonso, D. A. Cortes, G. Gonzalez, T. N. Hammond, W. M. Holler, H. Kataoka, A. C. Malinowski, V. M. Prichard, E. W. Rollins, Y. B. Rollins, S. E. Simonsen, H. Tucker, Jr., M. A. Witt; Assistant Professors: H. Kataoka, M. M. Magill, C. Malaxecheverria, L. A. Mykita, M. L. Sosower, R. W. Wallace; Assistant Professor Emeritus: R. B. Hall; Lecturer: E. Jezierski.

OPPORTUNITIES

Languages are the keys to the world. The continuous expansion of international relations makes the knowledge of foreign languages a critical need for today's professional. The student foreign languages is not limited to teaching, translating or interpreting. There are careers in politics, diplomacy, commerce, banking, agriculture, science, and research in which a thorough knowledge of foreign languages is crucial for success. The demand for multilingual personnel extends to all fields of human enterprise and will continue to grow in the coming years.

BACHELOR OF ARTS IN FRENCH OR SPANISH

All the general requirements for the Bachelor of Arts degree must be met, including six hours of literature survey within the Department of Foreign Languages and Literatures or in British and American literature or any combination of these. Degree designations are: B.A. in French Language and Literature, B.A. in Spanish Language and Literature, B.A. in French Language and Literature with Teacher Education option, and B.A. in Spanish Language and Literature with Teacher Education option.

Outstanding students may become members of Alpha Lambda, campus chapter of Phi Sigma Iota, National Foreign Languages Honor Society; of Xi Omicron, campus chapter of Sigma Delta Pi, National Hispanic Honor Society; and of Gamma Alpha, campus Chapter of Dobro Slovo, National Slavic Honor Society.

Major in French or Spanish—Students must complete 36 hours beyond the 201 level, including a senior seminar. Majors must take 12 additional hours of advised electives. These are waived for double majors such as Business and Spanish, among others.

Double Major in Business Management and Spanish or French—The B.A. degree double major in Business Management and Spanish or French is a curriculum sponsored by the Department of Economics and Business and the Department of Foreign Languages and Literatures. Students enrolled in this program have the opportunity to complete the 133 hours required for both majors within a four-year period.

Major in French or Spanish with Teacher Education Option—In collaboration with the School of Education, the department offers a program upon completion of which graduates may be certified as secondary school foreign language teachers in the North Carolina public school system. (Total 127 credit hours required for graduation.) Candidates should advise their academic counsellor as early as possible for the proper planning of their curriculum. They should formally declare their intention by the spring semester of the sophomore year.

No graduate degrees are given in foreign languages, but special courses and certification examinations are offered for advanced degree students.

Programs Abroad—The department offers a summer program in France, a summer program in Mexico, a summer program in Germany, and a semester program in Spain.

MINORS IN FOREIGN LANGUAGES AND LITERATURES

Minor programs in French, Spanish, Greek, Japanese and German involve fifteen hours of study at the 201 level and beyond. Programs include courses in language, literature and civilization. Students majoring in any area of study at NCSU are eligible to minor in a foreign language. Students may not, however, major and minor in the same language.

HISTORY

Harrelson Hall (Room 157)

Professor A. J. DeGrand, Head of the Department

Associate Professor J. R. Banker, Assistant Head of the Department

Assistant Professor D. P. Gilmartin, Coordinator of Advising

Professors: B. F. Beers, W. H. Beezley, C. H. Carlton, A. J. DeGrand, M. S. Downs, W. C. Harris, J. P. Hobbs, D. E. King, J. M. Riddle, R. H. Sack, E. D. Sylla, B. W. Wishy; *Professors Emeriti:* M. L. Brown, R. W. Greenlaw, L. W. Seegers, M. E. Wheeler; *Associate Professors:* J. R. Banker, A. J. LaVopa, L. O. McMurry, J. A. Mulholland, G. D. Newby, G. W. O'Brien, J. K. Ocko, S. T. Parker, R. W. Slatka, K. P. Vickery, K. S. Vincent; *Associate Professor Emeritus:* R. N. Elliott; *Assistant Professors:* J. E. Crisp, D. P. Gilmartin, S. A. Glenn, W. A. Jackson, W. C. Kimler, J. D. Smith, S. L. Spencer, G. D. Surh; *Adjunct Assistant Professors:* J. J. Crow, R. M. McMurry, W. S. Price, Jr., D. J. Olson, H. K. Steem; *Associate Status:* J. Bonham (UNI); *Instructor:* R. Butler.

An understanding of the historical background of our times is expected of the educated person. The Department of History makes it possible for students to gain this understanding through a wide range and variety of courses at all levels from introductory through graduate.

A broad offering of introductory courses is available to satisfy the undergraduate history requirement or part of the humanities and social sciences requirements in most university curricula. Students in the School of Humanities and Social Sciences are required to take two courses in history—one dealing with a culture significantly different from our own in pre-industrial Western or non-Western societies and the other dealing with our own culture in the United States or post-industrial Western societies.

Honors students are eligible for membership in Phi Alpha Theta.

Some introductory and advanced courses and most graduate courses are offered in the evening.

The department offers two Master of Arts degrees. Students interested in enhancing current teaching credentials or in going on to doctoral work elsewhere may take the traditional graduate program. Students interested in applied history may take the Archival Management program. Some financial assistance is available.

OPPORTUNITIES

A history major has traditionally served as a foundation for careers in such professions as teaching or law. In recent years undergraduates have frequently augmented studies in history with computer science, foreign language, or business administration, combinations which have proved attractive in business and government service. The prospect of new career ladders in public education has prompted renewed interest in an M.A. in history with advanced teaching certification. Multiplication of records of every kind has created a steady demand for historians with master's degrees in archival management.

BACHELOR OF ARTS IN HISTORY

Major in History—A history major must take 30 hours of course work in history in addition to the six hours required of all students in the School of Humanities and Social Sciences. These 30 hours must include a 491 seminar. At least 24 hours of the 30 must be at the 400 level or above. Sufficient courses are offered to complete the history requirements for the B.A. through the evening program.

Major in History with Social Studies Teacher Education Option—History majors may enroll in the teacher education program offered by the School of Humanities and Sciences in cooperation with the School of Education. Students who complete this program are eligible for certification to teach social studies in secondary school in North Carolina. In addition to Bachelor of Arts degree requirements, students are required to take professional courses in education and psychology and additional social sciences courses (132 credit hours required for graduation). Students desiring to enter this program should declare their intention during their sophomore year. They are required to file an application for formal admission during their junior year. Admission is competitive and the criteria include an overall grade point average of 2.5 or better.

BACHELOR OF SCIENCE IN HISTORY

A concentration in history involves 18 hours of course work beyond the six hours required of all students in the School of Humanities and Social Sciences plus a senior seminar. Of the 18 hours, at least 12 must be at the 300 level or above.

MULTI-DISCIPLINARY STUDIES

Link (Room 106)

Multi-Disciplinary Studies Committee

Professor J. M. Riddle (University Studies), Chairman

Professor L. S. Champion (English)

Professor J. P. Hobbs (History)

Professor M. M. Sawhney (Sociology and Anthropology)

Associate Professor W. C. Fitzgerald (Philosophy and Religion)

Associate Professor J. W. Wilson (Economics and Business)

The multi-disciplinary studies program allows a student to design his or her own academic major. Instead of following the requirements for a major in *one* of the traditional disciplines, the candidate for the Bachelor of Arts degree in multi-disciplinary studies has the responsibility of organizing a concentration or field of specialization from *two or more* disciplines. A concentration in Latin American Studies might, for example, combine related courses in language, literature, history, economics, sociology, and political science.

Three concentrations have been established primarily for the benefit of evening students. These are 1) American Studies: Cultural, Social, and Political; 2) Business Organization and Communication; and 3) Public Relations. All courses required for completion of these concentrations will be available in the evening.

The freshman and sophomore basic requirements for the multi-disciplinary studies program are the same as for the other Bachelor of Arts programs in humanities and social sciences. In satisfying basic requirements in language, humanities, social science, mathematics, and natural science, the student should, whenever possible, choose those courses that are most appropriate as background for the courses in his or her major concentration.

Admission to the Program

To become a candidate for a major in multi-disciplinary studies, a student first secures application forms and information from the office of the dean of the School of Humanities and Social Sciences (106 Link Building), then prepares a tentative proposal which includes a list of courses comprising 30 credit hours and an essay of 300-500 words explaining his or her reasons for desiring to make this set of courses the field of specialization. The student's proposal is reviewed by a faculty sponsor and submitted to the Multi-Disciplinary Committee for consideration. After a thorough examination to determine whether the set of courses

proposed as a multi-disciplinary major is academically sound and coherent, the committee will recommend that the Dean of Humanities and Social Sciences accept or reject the proposal; or it will be sent back to the student and his or her sponsor with suggestions for modification and resubmission.

PHILOSOPHY AND RELIGION

Winston Hall (Room 100)

Professor R. S. Bryan, Head of the Department

Associate Professor W. C. Fitzgerald, Assistant Head of the Department and Coordinator of Advising

Professors: W. R. Carter, T. H. Regan, J. C. VanderKam, A. D. VanDeVeer; Adjunct Professor: J. W. Bowker; Professor Emeritus: P. A. Bredenberg; Associate Professors: R. M. Hambourger, B. B. Levenbook, H. D. Levin, R. S. Metzger, C. M. Pierce; Associate Professors Emeriti: W. L. Highfill, J. L. Middleton; Assistant Professors: W. Adler, L. M. Antony, D. D. Auerbach, D. F. Austin, J. Levine, R. B. Mullin, T. K. Stewart; Instructor: M. K. Cunningham; Associate Member of the Department: C. L. Stalnaker (University Studies).

The Department of Philosophy and Religion at North Carolina State University 1) serves the needs of the university at large by providing courses devoted to the discussion of the great philosophic ideas of western civilization and of the religious concepts and principles that have had an impact on all of civilization, and 2) provides an opportunity for extensive technical study in philosophy for those students who wish to concentrate in this field either for its own sake or as an ideal intellectual foundation for subsequent graduate or professional study

SCHOLARSHIP

The Claire Simmons Allan-Samson Memorial Scholarship in Moral Philosophy, a renewable scholarship of \$1000 per year, will be awarded annually to worthy students who have expressed an interest in issues in animal rights.

OPPORTUNITIES

For students interested in postgraduate study, information compiled by post-college professional schools reveals the following:

Undergraduate philosophy majors who apply to graduate schools of management score first of thirty-two fields verbally, and third in combined total scores on the Graduate Management Admission Test, 1980-81.

Undergraduate philosophy majors who apply to law schools are more likely to be admitted than are students in fifty-four of the sixty-one fields represented according to statistics kept by the Law School Admissions Services, 1980-81.

Undergraduate philosophy majors who apply to medical schools are more likely to be admitted than are students in all but three of the thirty-five fields represented, as reported by the Association of American Medical Colleges, 1981-82.

On the verbal section of the Graduate Record Examination, students intending to study philosophy scored higher than students in ninety-seven of the ninety-eight intended fields represented, 1982-83.

Because undergraduate philosophy majors have the capability of scoring so well on the various postgraduate tests, many businesses and industries welcome philosophy majors into their training programs.

BACHELOR OF ARTS IN PHILOSOPHY

Candidates for the Bachelor of Arts degree in philosophy must complete 30 hours in philosophy, including either Logic (PHI 201) or Symbolic Logic (PHI 335); the courses in the development of western philosophic thought (PHI 300, 301, 319), and a course in value theory (PHI 275, 307, 308, 309, 311, or 312, 313, 314, 321, 322).

Major in Philosophy with a Concentration in Religious Studies—This program is designed especially to prepare students for theological seminary or graduate work in religion as well as to introduce them to the discipline of religious studies. Candidates for the Bachelor of Arts degree in philosophy with a concentration in religious studies must complete 33 hours, including 12 hours in philosophy and 21 hours in religion. The courses in philosophy must include a course in the development of western philosophic thought (PHI 300, 301, 319); a course in value theory (PHI 275, 307, 308, 309, 311, 312, 313, 314, 321, 322); and the course in the philosophy of religion (PHI 305). The courses in religion must include a course in biblical studies (REL 201, 311, 312); a course in non-western religions (REL 331, 332); a course in the history of western religion (REL 317, 318, 321, 323, 324); and a course in theology and culture (REL 309, 325, 327).

Major in Philosophy with a Concentration in Philosophy of Law—The program is designed to help students develop the ability to think critically about the role of the law and the values that it reflects. Because of its interdisciplinary nature, it provides a strong foundation for professional legal education. The concentration requires a minimum of 30 hours in philosophy (including the course taken to meet school requirements) and a minimum of 9 hours in political science. Three advised electives are required in addition to five core courses: PHI 309, PHI 312, PHI 313, PS 309 and PS 361. Four background courses, which are required of all philosophy majors, must also be taken: either PHI 201 or PHI 335, PHI 300, PHI 301, and PHI 319.

BACHELOR OF SCIENCE IN PHILOSOPHY

Candidates for the Bachelor of Science degree in philosophy must complete 27 hours in philosophy. These must include the courses in the history of western philosophic thought (PHI 300, 301), Symbolic Logic (PHI 335), Philosophy of Science (PHI 340); and a course in value theory (PHI 275, 308, 309, 311, or 312, 313, 314, 321, 322).

PHYSICAL EDUCATION

Carmichael Gymnasium (Room 2000)

Professor R. A. Lauffer, Head of the Department

Professor: F. R. Drews; Associate Professors: N. E. Cooper, J. M. Daniels, J. L. Shannon, W. H. Sonner; Associate Professors Emeriti: J. B. Edwards, A. M. Hoch, H. Keating, W. R. Leonhardt; Assistant Professors: S. V. Almekinders, A. L. Berle, J. V. Brothers, H. L. Brown, J. B. Brown, S. M. Chastain, W. A. Cheek, R. C. Combs, J. L. Dewitt, T. W. Evans, R. L. Goldberg, R. G. Gwyn, J. W. Isenhour, Jr., V. M. Leath, C. E. Patch, M. S. Rhodes, J. W. Stewart; Assistant Professors Emeriti: W. M. Shea, E. A. Smaltz; Lecturers: A. Attarian, J. K. Bartlett, R. N. Bechtolt, J. R. Bonner, D. S. Clark, K. L. Davis, L. R. Ellis, S. C. Halstead, R. H. Kidd, S. King, M. R. Lester, J. F. Matthews, I. F. Ormond, C. E. Raynor, T. C. Roberts, E. V. Smith, R. R. Smith, R. H. Taylor, G. E. Wall, T. C. Winslow, G. R. Youtt; Associate Members of the Faculty: D. L. Ridgeway (Statistics and Physics), and C. Stoddard (Athletics Department), and M. M. Turnbull (Health Services).

All undergraduate students are required to complete four credit hours of physical education courses in order to be eligible for a baccalaureate degree. Entering freshman and new transfer students who do not transfer physical education credits are required to complete PE 100 (Health and Physical Fitness). All students will be expected to take a survival swimming test. Students who do not pass this test will be expected to take PE 112 (Beginning Swimming). Neither the passing of the survival swimming test nor the completion of PE 112 with a D (or S) or better are requirements for graduation.

Beyond these required courses, students may select any other activity courses as a means of completing the four semester requirement. Insofar as faculty, facilities and allotment of time permit students will receive guidance in the selection of these courses based upon their individual needs.

The courses PE 280, *Emergency Medical Care and First Aid*; PE 281, *Introduction to Athletic Training*; PE 285, *Personal Health*; PE 286, *Nutrition, Exercise and Weight Control*; and PE 290, *Athletic Officiating I*, are offered as electives, but do not constitute credit toward meeting physical education requirements.

POLITICAL SCIENCE AND PUBLIC ADMINISTRATION

Link Building (Room 211)

Professor M. S. Soroos, Head of the Department

Associate Professor J. H. Gilbert, Assistant Head

Associate Professor B. A. Cigler, Director of Master of Public Affairs Program

Associate Professor K. S. Petersen, Coordinator of Advising

Professors: G. D. Garson, A. Holtzman, M. S. Soroos, D. W. Stewart, R. O. Tilman, J. O. Williams; *Professors Emeriti:* W. J. Block, J. T. Caldwell; *Associate Professors:* B. A. Cigler, R. H. Dorff, E. S. Fairchild, J. H. Gilbert, H. G. Kebschull, S. H. Kessler, J. P. Mastro, J. M. McClain, E. O'Sullivan, K. S. Petersen, E. R. Rubin, J. E. Swiss, M. L. Vasu; *Assistant Professors:* C. K. Coe, T. V. Reid, J. B. Rosch.

The Department of Political Science and Public Administration offers basic and advanced courses in all major fields of the discipline: American government and politics (local, state, and national), public law and criminal justice, public administration, comparative politics, international relations and global issues, political theory and methodology of political science. The department affords opportunities for the study of government and administration to students in other curricula and schools.

Graduate courses in political science are available to advanced undergraduates. See listing of graduate degree programs and consult the Graduate Catalog.

The department provides opportunities for internships in state and local government including the North Carolina General Assembly Legislative Internship Program.

Majors in political science with distinguished academic achievements are annually invited to join Zeta Epison Chapter of Pi Sigma Alpha, the national political science honor society.

OPPORTUNITIES

There are a number of careers and professions for which a major in political science, or extensive study of government and politics, can be most useful. This is true especially for those planning to seek careers in teaching, the legal profession, criminal justice agencies, state and local government, urban planning, the federal bureaucracy, journalism or in any of the organizations that seek to monitor the political processes or to influence the content of public policy. Private firms also seek managers and public affairs specialists who have a knowledge of the functioning of the political system and of politics in general.

BACHELOR OF ARTS IN POLITICAL SCIENCE

Major requirements are: 30 hours (in addition to any political science course which may be taken to satisfy the 12-hour social science requirement), 21 of which must be at the 300-level or above; PS 201 or equivalent; at least six hours in each of three pairs of deciles (Pair A: American Politics/Policy and Administration; Pair B: International or Comparative Politics; Pair C: Political Theory/Scope and Methods) and a Political Science Seminar (indicated by the letter "S" following its number, or by the word "seminar" in its title).

The department recommends that its majors, whenever practicable, take MA 111 and MA 112 in fulfillment of the School of Humanities and Social Sciences mathematics requirement.

Criminal Justice Option—The Departments of Political Science and Public Administration and Sociology and Anthropology offer undergraduate majors an option in criminal justice. This option includes 24 semester hours of specialized study. The program develops students who may move into middle management and policy making positions in agencies such as police, court, correctional, probation and parole agencies.

Students interested in criminal justice should contact Dr. Eva R. Rubin, 223 Link Building, Political Science and Public Administration or Dr. Elizabeth Suval, 230 1911 Building, Sociology and Anthropology.

Law and Political Philosophy Concentration—The concentration in law and political philosophy is an interdisciplinary program designed for students who are interested in the theoretical and legal dimensions of political life. It seeks to develop a broad understanding of the relationship between law and politics and the moral and philosophical questions which are central to both. The law and political philosophy concentration is fulfilled by successful completion of twelve hours of core course requirements, nine hours of recommended electives, and completion of the normal political science major requirements. Six hours of the core course requirements and at least three hours of the recommended electives will be taken in the Department of Philosophy. Courses in the concentration provide a humanistic perspective on legal and political questions. The program is suitable for those interested in a career in law or government, or those who hope to pursue graduate studies in either political science or philosophy.

Social Studies Teacher Education Option—A major in political science may also choose a teacher education option. This is a 131-credit hour degree program which includes the normal 30-hour major plus the required professional education courses. Successful completion of the program leads to certification to teach social studies in the secondary schools.

BACHELOR OF SCIENCE IN POLITICAL SCIENCE

The major requirements for a B.S. degree in political science are identical to the B.A. except that 27 hours of course work in the discipline are required instead of 30.

SOCIOLOGY AND ANTHROPOLOGY

(Also see Agriculture and Life Sciences)

1911 Building (Room 301)

Professor L. B. Otto, Head of the Department

Professor W. B. Clifford, Acting Assistant Head for SALS Programs

Professor P. N. Reid, Director of Social Work

Associate Professor M. L. Walek, Assistant Head of the Department and Coordinator of Advising

Associate Professor A. C. Davis, Coordinator of Advising (Applied Sociology)

Professor R. L. Moxley, Graduate Administrator

TEACHING AND RESEARCH

Professors: W. B. Clifford, II, L. R. DellaFave, V. A. Hiday, C. P. Marsh, R. L. Moxley, L. B. Otto, P. N. Reid, M. M. Sawhney, E. M. Suval, O. Uzzell, R. C. Wimberley; *Professors Emeriti:* L. W. Drabick, H. D. Rawls, J. N. Young; *Associate Professors:* M. P. Atkinson, R. C. Brisson, A. C. Davis, J. C. Leiter, G. S. Nickerson, W. C. Peebles, I. Rovner, M. D. Schulman, R. J. Thomson, K. M. Troost, M. L. Walek, J. M. Wallace, E. M. Woodrum, M. T. Zingraff; *Associate Professors Emeriti:* J. G. Peck, I. E. Russell; *Assistant Professors:* J. S. Brown, R. S. Ellovich, G. D. Hill, T. M. Hyman, B. J. Risman, L. A. Smith, D. T. Tomaskovic-Devey, L. R. Williams; *Assistant Professor Emeritus:* C. G. Dawson.

EXTENSION

Associate Professor S. K. Garber, Acting Specialist-in-Charge

Professor Emeritus: M. E. Volland; *Associate Professors:* S. K. Garber, S. C. Lilly.

The Department of Sociology and Anthropology offers introductory and advanced courses in sociology, anthropology, and social work covering the major sub-fields of the three disciplines. It also offers supervised field work and practicum experiences required for certain curricula in the department.

Aims of the departmental offerings are: (1) To provide majors with academic background and experience useful for many careers in government and industry or for pursuing

advanced academic work (for a description of the graduate degrees offered by the department, see the NCSU Graduate Catalog) and (2) To provide service courses to students in other curricula and to students in the Division of Continuing Education.

The department, jointly administered by the Schools of Humanities and Social Sciences and Agriculture and Life Sciences, offers eight undergraduate curricula. The five curricula administered by the School of Humanities and Social Sciences are: Bachelor of Arts in sociology, Bachelor of Arts in sociology with criminal justice option, Bachelor of Arts in sociology with social studies teacher education option, Bachelor of Arts in sociology with anthropology concentration, and Bachelor of Social Work.

OPPORTUNITIES

A wide variety of jobs is open to the graduates of this department.

Both public and private firms employ sociologists in policy development and decision-making. Sociology graduates are also employed as research evaluators and sales personnel.

Sociology graduates with the criminal justice option have additional opportunities in law-enforcement field. Similarly, graduates with social studies teacher education option have additional opportunities in public and private schools while the graduates with anthropology concentration have the option to pursue graduate studies in anthropology.

Students graduating with Bachelor of Social Work degree are employed as social workers in public and private social work organizations. Fields of employment include public welfare agencies, family and children's agencies, hospitals, school systems, mental health services, correctional programs, community-centers, rehabilitation agencies, and services to the aged.

BACHELOR OF ARTS IN SOCIOLOGY

The following departmental requirements must be met by all students majoring in sociology: A minimum of 30 hours in the major field including SOC 202, Principles of Sociology; SOC 301, Human Behavior; SOC 415, Social Thought; SOC 416, Research Methods; and a minimum of six elective courses in sociology, with at least three at the 400 or higher level. The department also requires 15 additional hours of social science including one course in psychology; ANT 252, Cultural Anthropology, and an additional ANT course are strongly recommended. One course in statistics is also required.

Criminal Justice Option—The criminal justice option seeks to develop a professional orientation that will be relevant both to occupational goals and participation as a citizen in community affairs. Courses in both political science and sociology are included in a 28-hour block that provides a general background in crime causation and agencies of criminal justice plus the opportunity to select from more specific courses dealing with deviance, juvenile delinquency, the court system, correctional facilities, and the like, including field placement in an agency of the criminal justice system.

Social Studies Teacher Education Option—This curriculum prepares the student for state certification in social studies in the secondary school system. (132 credit hours required for graduation.) The inclusion of a professional semester with practice teaching and the need for a broad base in the social sciences makes this a comparatively demanding program with somewhat less opportunity for free electives. Courses in education and psychology are taken beginning in the sophomore year in preparation for the teaching experience. In addition, the student learns the basic concepts of economics, political science, anthropology and history, as well as sociology.

Anthropology Concentration—This concentration emphasizes the complementary nature of sociology and anthropology in understanding human behavior in social and cultural context. It encourages flexibility in selection from both anthropology (12 hours within the major plus 6 hours in the social science requirement) and sociology (21 hours) courses. The four anthropological subdisciplines of cultural anthropology, physical anthropology, archaeology, and linguistics are represented in the course offerings.

BACHELOR OF SOCIAL WORK

The curriculum is accredited by the Council on Social Work Education and prepares students for the professional practice of social work in a variety of social welfare agencies, organizations, and programs designed to enrich the quality of life and to improve social functioning of people served. Study will include the social, economic, and political processes involved in the development and change of social welfare institutions, the dynamics of human behavior and the interventive methods and their application to a variety of situations and clients. Thirty-three hours of class and field instruction in social work, plus specified courses in the social sciences, the humanities, and natural sciences are required. Graduates receive the B.S.W. degree and are certifiable under North Carolina law.

MINOR IN ANTHROPOLOGY

A minor in anthropology focuses on the comparative study of human beings, with emphasis on both the physical and cultural aspects. A flexible selection of courses (15 credit hours) include offerings from anthropological subdisciplines such as cultural anthropology, physical anthropology, archaeology, and linguistics.

SPEECH-COMMUNICATION

Winston Hall (Room 206)

Professor W. J. Jordan, Head of the Department

Associate Professor R. S. Rodgers, Assistant Head of the Department and Coordinator of Advising

Professors: W. G. Franklin, C. A. Parker; Associate Professors: R. Anderson, L. R. Camp, P. C. Caple, L. W. Long, H. E. Munn, Jr., B. L. Russell, R. L. Schrag; Assistant Professors: D. A. DeJoy, E. T. Funkhouser, G. A. Hankins, R. Leonard, N. H. Snow; Lecturers: J. Alchediak, C. A. Elleman.

The speech-communication program provides training in human communication for professionals entering business, industry, social service and education. The objective is to produce graduates whose understanding of communication problems and solutions makes them uniquely qualified to contribute their expertise to the betterment of society. Recognizing the complexity of human communication acts, the department approaches the study of communication from humanistic, social science, and natural science perspectives with area emphasis in public communication, interpersonal and organizational communication, mass communication, theatre, and communication disorders. The department is strongly committed to training professionals to address the complex human communication problems found in modern business and industry.

OPPORTUNITIES

Increasingly, business and industry are recognizing the need for skilled communication professionals in all facets of the work place. Consequently, depending upon the area of specialization, graduates may find employment opportunities as communication consultants, media specialists, trainers, public relations specialists, therapists, or performers. In addition, many employers seek graduates with demonstrated competencies in human communication to fill a wide variety of positions which require constant and skillful contact with the public or with personnel.

The department sponsors the Student Communication Association which is open to all majors and offers scholarly and social activities. The department also has a chapter of Alpha Epsilon Rho, the National Honorary Broadcasting Society, and a chapter of the Public Relations Student Society of America.

JOURNALISM CONCENTRATION

A journalism concentration is offered by the departments of Speech Communication and English for humanities and social science students interested in developing skills in writing for the print and electronic media to supplement their specific major. The program provides basic preparation for careers requiring written communication, such as those in newspaper and magazine writing, radio, television, public relations, corporate communications, and marketing. In addition to a departmental major, the concentration requires completion of 12 hours of core courses and 1 elective course. *The journalism concentration is NOT open to speech communication majors with a telecommunications emphasis.*

BACHELOR OF ARTS IN SPEECH-COMMUNICATION

The major in speech-communication includes 31 semester hours. The curriculum in speech-communication requires four prescribed courses SP 100, *Foundations of Communication Theory*; SP 110, *Public Speaking*; SP 200, *Introduction to Communication Inquiry*; and SP 490, *Senior Seminar in Speech-Communication*. Students elect the remaining courses from among offerings in public communication, interpersonal and organizational communication, telecommunication, theatre communication, and communication disorders.

DIVISION OF UNIVERSITY STUDIES

Harrelson Hall (Room 144)

Professor J. M. Riddle, Head

Professor C. D. Korte, Assistant Head

Professors: D. Huisinigh, C. D. Korte; Professors Emeriti: A. C. Barefoot, J. R. Lambert, Jr.; Associate Professors: D. A. Adams, R. L. Hoffman; Assistant Professor: J. C. Bonham; Lecturers: E. Malloy-Hanley, C. L. Stalnaker.

University Studies is an academic unit responsible for interdisciplinary programs dealing with contemporary and historical issues and problems. Courses are taught by teams of faculty drawn from the division and from the academic disciplines relating to the problems or issues under consideration. These courses are open without prerequisite to students in all curricula.



SCHOOL OF PHYSICAL AND MATHEMATICAL SCIENCES

Cox Hall (Rooms 113-122)

G. Briggs, *Dean*

R. D. Bereman, *Associate Dean for Academic Affairs*

L. B. Sims, *Associate Dean for Research*

W. P. Hill, *Coordinator for Afro-American Affairs and Cooperative Education*

The School of Physical and Mathematical Sciences offers students, whose interests lie in the basic science and mathematical areas, programs of study and research both at the graduate and undergraduate level, which lead to many exciting career opportunities. In addition, the school provides the basic science education support for the other eight schools. The school consists of seven academic departments: Biochemistry, Chemistry, Computer Science, Marine, Earth and Atmospheric Sciences, Mathematics, Physics, and Statistics. The Institute of Statistics, the microelectronics research effort and the new biotechnology research effort are also associated in part with the school.

Graduates of the school are recruited for technical and administrative positions in industrial research and development laboratories, universities and colleges, non-profit research organizations and government agencies. A large percentage of the graduates undertake advanced study in medical or other professional schools as well as further study leading to the Master of Science and Doctor of Philosophy degrees.

The high school student who enjoys computers, mathematics, chemistry or physics and who has an interest in natural phenomena and their fundamental descriptions, should consider the career opportunities in the physical and mathematical sciences. Students in the school consistently perform very well as undergraduates; approximately one-third of the students graduate with honors or high honors.

FACILITIES

Each department in the school has obtained a number of highly specialized research facilities and instruments. A few of the major facilities are: a plasma physics laboratory supported by a research tube-making facility; a 0-35 Mev. Cyclograaff at the Triangle Universities Nuclear Laboratory; a radio-chemistry laboratory; a two-million volt Van de Graaff accelerator; a laser research laboratory; an extensive nuclear magnetic resonance facility including a Bruker 250 MHz NMR Spectrometer; a Syntex automated X-ray diffractometer, a marine geochemical laboratory housing a carbon-14 dating facility; a remote sensing laboratory; an upper atmosphere laboratory; a biomathematics and biophysics laboratory; extensive specialized undergraduate and graduate desk computing laboratories; and solid state research laboratories. Other campus facilities for teaching and research are electron microscopes, a heterogeneous nuclear reactor designed for operation at 100 kilowatts, complete x-ray laboratories with diffraction and radiographic equipment, precision instrument and glassblowing shops.

Computing facilities available for course work and research include an IBM 3081 and an IBM 370/165 jointly owned by NCSU, Duke University, and UNC-CH. On the NCSU campus are an IBM 4341, a DG MV/8000, a DEC VAX 11/780, a DEC PDP 11/40, a Sage IV microcomputer lab of 150 workstations, several teaching labs containing Apples and IBM/PC's, and a microprocessor teaching lab.

Physics research laboratories are located in Daniels Hall and the Nuclear Science Building and at the Triangle Universities Nuclear Laboratory in Durham.

CURRICULA

The school offers undergraduate programs of study leading to the Bachelor of Science degree with a major in chemistry, computer science, geology, mathematics, meteorology, physics or statistics. These curricula have similar freshman years, enabling a freshman to change, without loss of time, from one department to another in the school. In addition, the school offers programs of study leading to the Bachelor of Arts degree with a major in geology or chemistry. A one year general program is offered to students who want to major in one of these curricula but have not yet made a decision.

PREMEDICAL SCIENCES

Medical and dental schools as well as many other health related professional schools have long regarded degrees in the basic physical and mathematical sciences as excellent "pre-professional" curricula. Some professional schools prefer the indepth knowledge gained by this route over those curricula which offer a cursory view of a variety of topics. For further details, contact Dr. Robert Bereman, Associate Dean for Academic Affairs or Dr. Marion Miles, School of Physical and Mathematical Sciences Pre-Professional Advisor.

SHORT COURSES AND INSTITUTES

Several short courses and specialized institutes are offered throughout the academic year and during the summer months in chemistry, computer science, geology, mathematics, physics, and statistics for high school teachers and college professors. For information, write the associate dean of the school.

In addition, certain regular courses may be taken for credit through correspondence or evening classes through the Division of Continuing Education in Raleigh, Charlotte or in the Greensboro-Burlington-Winston-Salem area. For information write North Carolina State University Division of Lifelong Education, Raleigh.

SCHOLARS AND HONORS PROGRAMS

Exceptional students may be selected to participate in the Scholars Program of the School of Physical and Mathematical Science (PAMS). Enriched courses in chemistry, computer science, English, mathematics, and physics have been developed specifically for program participants. At the beginning of the junior year, promising students may select special courses, participate in undergraduate research and honors programs, and receive some graduate credit toward the Master of Science degree during the senior year.

Well-prepared students entering the school may seek advanced placement in biology, chemistry, computer science, foreign language, history, mathematics, or physics by passing qualifying examinations.

STUDENT ACTIVITIES

In addition to university-wide extracurricular activities and honor organizations, the School of Physical and Mathematical Sciences has student chapters of the following professional and honor organizations: Society of Physics Students, Pi Mu Epsilon, Upsilon Pi Epsilon, the American Chemical Society, the Association for Computing Machinery, and the nation's first chapter of the Society of Black Physical and Mathematical Scientists.

The PAMS Council, composed of elected students from the school, sponsors and participates in a wide variety of technical and social activities.

GRADUATE STUDY

The Master of Science degree is available with a major in biochemistry; biomathematics; chemistry; computer studies; marine, earth, and atmospheric sciences; mathematics; applied mathematics; statistics; and physics. The Master of Biomathematics, Chemistry, and the Master of Statistics are also offered. The Doctor of Philosophy degree is available in biochemistry; biomathematics; chemistry; computer science (joint with the School of Engineering); marine, earth, and atmospheric sciences; mathematics; applied mathematics; statistics; and physics.

BIOCHEMISTRY

(See Agriculture and Life Sciences)

CHEMISTRY

Dabney Hall (Room 108) and Withers Hall

Professor K. W. Hanck, Head of the Department

Professor W. P. Tucker, Assistant Head for Undergraduate Studies

Professor M. L. Miles, Assistant Head for Business Affairs

Professor C. G. Moreland, Assistant Head for Graduate Studies

Professors: K. J. Bachmann, H. A. Bent, R. D. Bereman, L. H. Bowen, C. L. Bumgardner, H. H. Carmichael, M. K. DeArmond, L. D. Freedman, F. W. Getzen, F. C. Hentz, Jr. (Director of General Chemistry), Z. Z. Hugus, Jr., L. A. Jones, S. G. Levine, G. G. Long, A. F. Schreiner, L. B. Sims, E. O. Stejskal, G. H. Wahl, Jr. (Director of Organic Chemistry); Adjunct Professor: M. E. Wall; Professors Emeriti: G. O. Doak, R. H. Loeppert, W. A. Reid, P. P. Sutton, R. C. White; Associate Professors: C. B. Boss, T. C. Caves, A. F. Coots, Y. Ebisuzaki, S. T. Purrington, W. L. Switzer, D. W. Wertz, M. Whangbo; Associate Professor Emeritus: T. M. Ward; Assistant Professors: E. F. Bowden, R. J. Linderman, R. B. van Breemen; Assistant Professors Emeriti: T. J. Blalock, W. R. Johnston; Instructor Emeritus: G. M. Oliver; Laboratory Supervisors: R. D. Beck, G. L. Hennessee, G. Shaw, J. T. Sigvaldsen, P. Singh; Laboratory Demonstrator: M. L. Benevides; Teaching and Research Technicians: M. C. Bundy, D. E. Knight.

Chemistry is the science dealing with the composition, structure, and properties of all substances and changes that they undergo. Chemists have contributed to the synthetic fiber industry, petroleum products and fuels, plastics, the food processing industry, nuclear energy, electronics, modern drugs and medicine. Today's chemists are concerned with the fundamental building blocks of all materials—atoms and molecules—leading to improvement of old materials, development of substitutes or new ones, and an understanding of our material environment.

OPPORTUNITIES

The chemical industry is the nation's largest manufacturing industry. Chemists comprise the largest proportion of scientists in the United States, and future demand for chemists should continue to grow. A variety of jobs is open to the chemist: biochemistry and other biological areas, education, medicine, law, metallurgy, space science, oceanography, sales or management, pure research and development. Chemists are employed in every field based on modern technology; opportunities for chemists in the field of education are many and varied.

BACHELOR OF SCIENCE IN CHEMISTRY

The curriculum, accredited by the American Chemical Society, includes a strong, broad background in mathematics, physics and the liberal arts. The basic areas of organic, physical, inorganic and analytical chemistry are stressed. Laboratory and classroom work develop the skills, knowledge and inquiring spirit necessary for a successful career in chemistry. The minor field and elective credits allow individual diversity at the junior and senior levels. Many undergraduates participate in current departmental research through part-time employment or a senior research project. This curriculum prepares the student to enter the job market directly as a chemist or to enter various professional schools or graduate school in chemistry or an allied science. This route is also an excellent premedical program.

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry I	4	CH 107 Principles of Chemistry	4
CH 106 Laboratory Techniques I	1	CH 108 Laboratory Techniques II	1
ENG 111 Composition and Rhetoric	3	ENG 112 Composition and Reading	3
MA 102 Analytic Geometry & Calc. I	4	MA 201 Analytic Geometry & Calc. II	4
PE 100 Health & Physical Fitness	1	PY 201 General Physics*	4
Humanities/Soc. Sci. Elective	3	Physical Education Elective	1
	16		17

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 221 Organic Chemistry I	4	CH 223 Organic Chemistry II	4
MA 202 Analytic Geometry & Calc. III	4	MA 301 Applied Differential Equations I	3
PY 202 General Physics*	4	PY 203 General Physics*	4
English or Speech Elective	3	English or Speech Elective	3
Physical Education Elective	1	Free Electives	3
	16	Physical Education Elective	1
			18

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 428 Qualitative Organic Analysis	3	CH 401 Systematic Inorganic Chemistry	3
CH 431 Physical Chemistry I	3	CH 433 Physical Chemistry II	3
FLG 101 Elementary German I	3	CH 434 Physical Chem. II Lab	2
Humanities/Soc. Sci. Elective	3	FLG 102 Elementary German II	3
Minor**	3	Humanities/Soc. Sci. Elective	3
	15	Minor	3
			17

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 411 Analytical Chemistry I	4	CH 413 Analytical Chemistry II	4
Chemistry Elective	2	Humanities/Soc. Sci. Elective	3
Humanities/Soc. Sci. Elective	3	Minor	3
Minor	3	Free Electives	6
Free Electives	3		16
	15		

Minimum Hours Required for Graduation 130

*The sequence PY 205, 208, 407 may be substituted for PY 201, 202, 203, with approval of the advisor.

**The minor may be in any field closely related to chemistry, such as mathematics, physics, computer science, geo-science, statistics, biological sciences, engineering or science education. A total of four courses in two such areas may constitute a split minor. The minor field should be chosen in consultation with the faculty adviser prior to or during the junior year.

BACHELOR OF ARTS IN CHEMISTRY

The B.A. program offers a much more flexible course of studies for students who do not wish to become professional chemists but who desire an interdisciplinary program with an emphasis on chemistry. The proper choice of electives will prepare the graduate for one of the following: medical or dental school, work in chemical sales and management, teaching in secondary schools, work in environmental science, or graduate school in an allied science. Nationally most premedical students are in a B.A. chemistry program. Since the first year is identical to that of the B.S. program, students may enter the B.A. program either directly from high school or at the end of their first year.

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry	4	CH 107 Principles of Chemistry	4
ENG 111 Composition and Rhetoric	3	ENG 112 Composition and Reading	3
MA 102 Analytic Geometry & Calc. I	4	MA 201 Analytic Geometry & Calc. II	4
PE 100 Health & Physical Fitness	1	PY 205 General Physics	4
Humanities/Soc. Sci. Elective	3	Physical Education Elective	1
	15		16

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 221 Organic Chemistry I	4	CH 223 Organic Chemistry II	4
PY 208 General Physics	4	Humanities/Soc. Sci. Elective*	3
Humanities/Soc. Sci. Electives*	6	Science Elective	4
Physical Education Elective	1	Free Elective	3
	15	Physical Education Elective	1
			15

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
BCH 451 Elementary Biochemistry	3	CH 315 or CH 317 Quantitative Analysis	4
Humanities/Soc. Sci. Electives*	6	Advised Elective**	4
Science Elective	4	Humanities/Soc. Sci. Elective*	6
Free Elective	3	Free Elective	3
	16		17

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 331 Introductory Physical Chemistry	4	CH 401 Systematic Inorganic Chemistry	3
Advised Electives**	7	Advised Electives**	7
Humanities/Soc. Sci. Elective*	3	Humanities/Soc. Sci. Elective*	3
Free Elective	3	Free Elective	3
	17		16

Minimum Hours Required for Graduation 127

Because of the inherent flexibility of the B.A. curriculum in chemistry, students entering into the program must work closely with their faculty adviser in selecting an area of concentration outside the major, based upon their career or postgraduate goals.

*These credits should be distributed approximately equally between the humanities (fine arts, history, literature, languages, philosophy, and religion) and the social sciences (anthropology, economics, political science, psychology and sociology). No more than 10 credit hours in a single discipline may be used to satisfy the requirement. At least 12 credits must come from courses beyond the introductory level.

**Advised electives are designed to allow the student to concentrate efforts in the complementary field of his choice.

COMPUTER SCIENCE

Daniels Hall (Rooms 120 and 122)

Professor R. E. Funderlic, Head of the Department

Associate Professor T. L. Honeycutt, Associate Head of the Department

Lecturer J. Hatch, Assistant Head of the Department, Coordinator of Advising

Professors: W. Chou, D. C. Martin, D. F. McAllister, R. J. Plemmons, W. J. Stewart, K. C. Tai, A. L. Tharp; Associate Professors: E. W. Davis, Jr., R. J. Fornaro, H. D. Levin, H. G. Perros, W. E. Robbins, R. D. Rodman, C. D. Savage; Adjunct Associate Professor: V. Ahuja; Assistant Professors: N. M. Bengtson, G. Y. Fletcher, E. F. Gehringer, J. Mauney, M. F. Stallmann, N. F. Williamson; Adjunct Assistant Professor: R. K. Scott; Adjunct Lecturers: J. E. Felder, D. A. Lasher, W. D. Ruchte, D. A. Schur, E. R. Secrest, W. W. Turyn, Jr., R. W. Weeks; Instructor: G. N. Fostel; Adjunct Instructor: D. Van Benthuyssen; Laboratory Supervisor: S. Warren, Jr.; Research Assistant: L. W. Taylor; Associate Member of the Department: W. J. Rasdorf (Civil Engineering).

The discipline of computer science has developed during the past three decades as a direct consequence of rapid growth of computers. This unprecedented technical revolution has made computers a part of life. Almost all areas of industry, the military establishment, government agencies, education and business use computers, and new applications continue to arise. Computers are used to help make and operate our automobiles, airplanes and spaceships; to help design our highways, bridges and buildings; to handle banking transactions and to assist in management decisions; to analyze farm production; as a research tool for the scientist; to monitor manufacturing processes, utilities and communication; and to provide a multitude of other services.

OPPORTUNITIES

A wide range of jobs exist for computer scientists since computers have diverse applications. There is a need for basic research into the principles of computer system design and the analysis of computational algorithms, and students may choose to continue their training with graduate study.

CURRICULUM IN COMPUTER SCIENCE

This undergraduate curriculum leads to a degree of Bachelor of Science in Computer Science. Core courses provide foundations in programming and computer languages, the structure of data, computer architecture, numerical analysis, and the theory of computation and programming languages. The restricted electives chosen in consultation with one's adviser during the junior year allow exploration of specific computer science areas or fields such as management information systems, database management systems, simulation graphics, and software engineering.

Students in other departments may select courses in computer science as electives to broaden their programs of study and to learn how to use the computer for solving problems.

Before a computer science major is eligible to enroll in any 200 or 300 level required course in computer science the student must have a 2.00 or higher grade point average.

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CSC 101 Intro. to Programming	3	CSC 102 Program Concepts	3
ENG 111 Composition & Rhetoric	3	ENG 112 Composition & Reading	3
MA 102 Analytic Geometry & Calc. I	4	MA 201 Analytic Geometry & Calc. II	4
PE 100 Health & Physical Fitness	1	Basic Science	3
Basic Science	3	Humanities/Soc. Sci. Elective	3
	14	Physical Education Elective	1
			17

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CSC 201 Basic Comp. Org. & Assem. Lang.	3	CSC 202 Conc. & Facil. Oper. System	3
MA 202 Analytic Geometry & Calc. III	4	CSC 311 Data Structures	3
PY 205 General Physics	4	MA 405 Intro. Linear Alg. & Mat.	3
English Literature	3	PY 208 General Physics	4
Humanities/Soc. Sci. Elective	3	Humanities/Soc. Sci. Elective	3
Physical Education Elective	1	Physical Education Elective	1
	18		17

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CSC 302 Intro. to Numer. Meth.	3	CSC 312 Comp. Organ. & Logic	4
CSC 322 Discrete Math Struc.	3	ST 372 Intro. Stat. In & Reg. or	
ST 371 Intro. to Prob. & Dist. Theory or		ST 422 Intro. to Math Statis.	3
ST 421 Intro. to Math Stat.	3	CSC Theory Course	3
Humanities/Soc. Sci. Elective	3	Humanities/Soc. Sci. Elective	3
Restricted Elective	3	Restricted Elective	3
Free Elective	3		16
	18		

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ENG 321 Commun. of Tech. Info.	3	Restricted Elective	3
CSC Project Course	3	Restricted Elective	3
Humanities/Soc. Sci. Elective	3	Restricted Elective	3
Restricted Elective	3	Free Elective	3
Free Elective	3	Free Elective	3
	15		15

Minimum Hours Required for Graduation 130

COMPUTER STUDIES PROGRAM

Professor W. Chou, Director

Professor W. J. Stewart, Associate Director

Professors: D. P. Agrawal, W. E. Alexander, R. E. Funderlic, W. S. Galler, H. J. Gold, D. C. Martin, H. T. Nagle Jr., J. B. O'Neal, R. J. Plemmons, R. S. Sowell, W. J. Stewart, R. E. Stinner, K. C. Tai, A. L. Tharp; *Adjunct Professor:* J. R. Suttle; *Professor Emeritus:* P. E. Lewis; *Associate Professors:* E. W. Davis, R. J. Fornaro, T. L. Honeycutt, D. M. Latch, H. D. Levin, A. A. Nilsson, H. G. Perros, S. A. Rajala, W. E. Robbins, R. D. Rodman, C. D. Savage, J. C. Smith, W. E. Snyder, H. J. Trussell; *Assistant Professors:* S. T. Alexander, N. M. Bengtson, N. A. Blue, G. Y. Fletcher, E. F. Gehringer, W. T. Liu, R. C. Luo, J. Mauney, R. Mehrotra, T. K. Miller, III, W. J. Rasdorf, M. F. Stallmann, M. A. V. Vouk, N. F. Williamson.

The computer studies program is an interdisciplinary graduate program which is administratively supported by the Departments of Computer Science and Electrical and Computer Engineering with participation by faculty members primarily from computer science, electrical and computer engineering and operations research.

The program integrates the computer-software oriented curriculum of the Department of Computer Science and the computer hardware-oriented curriculum of the Department of Electrical and Computer Engineering into a single curriculum.

The program offers Master of Science and Master of Computer Studies degrees. Students interested in a Ph.D. degree may pursue the degree through the Department of Electrical and Computer Engineering and may choose either the computer engineering or computer science option. Students may also obtain the degree via a joint Ph.D. degree arrangement with operations research, mathematics, statistics, or biomathematics. In this case, the degree is formally granted through the respective department or program.

MARINE, EARTH, AND ATMOSPHERIC SCIENCES

Withers Hall (Room 214)

Professor H. S. Brown, Head of the Department

Associate Professor E. F. Stoddard, Undergraduate Administrator

Professors: C. E. Anderson, S. P. S. Arya, G. Briggs, V. V. Cavaroe, Jr., J. M. Davis, G. S. Janowitz, D. L. Kamykowski, L. J. Pietrafesa, S. Raman, C. W. Welby, T. G. Wolcott, I. J. Won; *Adjunct Professor:* W. H. Snyder; *Professors Emeriti:* L. J. Langfelder, C. J. Leith, J. M. Parker, III, W. J. Saucier; *Associate Professors:* D. J. DeMaster, R. V. Fodor, M. M. Kimberley, C. E. Knowles, J. M. Morrison, C. A. Nittroer, A. J. Riordan, V. K. Saxena, G. F. Watson; *Adjunct Associate Professors:* J. K. S. Ching, R. E. Eskridge, G. W. Thayer; *Assistant Professors:* M. G. Bevis, N. E. Blair, S. Businger, M. DeMaria, L. A. Levin, A. P. S. Reymer, W. J. Showers; *Adjunct Assistant Professor:* T. B. Curtin, K. E. Karlstrom.

The Department of Marine, Earth and Atmospheric Sciences provides instruction in three complementary disciplines whose concerns are the solid earth, the oceans upon it, and the atmosphere extending upward from its surface. The department awards the B.A. degree in geology; a B.S. degree in geology with options either in traditional geology or in geophysics; and a B.S. degree in meteorology. Degrees in Marine Science are offered only at the graduate level. (Consult the Graduate Catalog for information pertaining to graduate degrees offered.)

Geology (Earth Science) is the study of the solid earth. It can be subdivided into four interrelated areas: rocks and minerals (mineralogy, petrology, and ore deposits); nature and behavior of earth materials (structural geology, geophysics, geochemistry, and geomorphology); earth history (historical geology, stratigraphy, tectonics and paleontology); and the earth's influence upon humanity (engineering, petroleum, economic and environmental geology and hydrogeology). Instruction within the geology degree programs includes course work in each of these areas. The geophysics option includes a core of basic geology courses, but in addition provides a thorough grounding in geophysics and related sciences. The program involves more coursework in physics, mathematics and computer science than does the traditional Geology B.S. Geophysics applies these quantitative sciences to an understanding of earth, including its deep interior. This is accomplished through the measurement and interpretation of earth's physical properties (e.g. magnetic, electric, gravity, seismic) at all scales.

Geologists and geophysicists apply scientific techniques to solve those problems in nature that will result in a better understanding and utilization of our environment and natural resources. Geologic and geophysical principles are used (1) to discover, evaluate, develop and conserve our natural resources (oil, coal, water and metals), (2) to find solutions to problems related to disposal of liquid and solid wastes, (3) in determining the geologic settings for highways, dams, tunnels, and power plants and (4) to help prevent or alleviate the consequences of natural disasters such as earthquakes, floods, volcanic eruptions, dam failures, flooding, and highway collapse.

Meteorology (Atmospheric Science) is the study of all aspects of the behavior and phenomena of the atmosphere, including its interactions with earth's land and sea surfaces and with the solar atmosphere. Its objective is to apply an understanding of the atmosphere to the benefit of humanity.

Few activities on earth are unaffected by the natural conditions and processes of our atmospheric environment. The most familiar purpose of meteorology is in providing weather reports, warnings, and forecasts which are essential to aviation, shipping, agriculture, solar and wind energy utilization, outdoor recreation and to the protection of man from weather hazards and damage. Meteorology is applied to the understanding and alleviation of other environmental concerns such as air pollution, acid rain, and weather modification. The concern about environmental quality has led to expanded efforts in atmospheric modelling and monitoring, research applied to industrial operations, environmental planning and governmental regulation. Basic subdivisions in the field of meteorology are synoptic and dynamic, boundary layer, air pollution, and agricultural meteorology; cloud and aerosol physics; and climatology.

Oceanography (Marine Science) is primarily taught at the graduate level (see Graduate Catalog). The department does offer two introductory courses at the undergraduate level. One of these (MEA 200) provides a survey of the marine science field; the other (MEA 220) is a survey of marine biology. The department also offers several beginning graduate level courses for senior level undergraduate students. Students interested in pursuing a graduate program in marine science may wish to enroll in these courses as electives. A strong undergraduate foundation in one of the basic sciences or in engineering is needed before a student concentrates in marine related fields. Therefore, graduate students in marine science are drawn from undergraduate programs in biology, chemistry, engineering, geology, mathematics, meteorology or physics.

OPPORTUNITIES

The problems involving energy and mineral resources and the environment are complex and will not likely yield to easy or quick solutions. Geologists and geophysicists are currently employed by oil and coal companies, mining and quarrying concerns, mineral exploration companies, construction firms, cement companies, and railroads; coastal and forest service agencies; schools, colleges, museums and research institutions; and city, state and federal agencies (e.g. D.O.E., U.S.G.S., N.A.S.A., and E.P.A.).

Meteorological and oceanographic services are provided by federal government agencies, primarily the National Oceanic and Atmospheric Administration and components of the Department of Defense. This work may involve atmospheric and oceanic sensing and

measurement, including the use of satellites and space probes; data analysis and computation; weather forecasting, and guidance services to aeronautics, defense and public safety agencies, agriculture, forestry, hydrology, recreation and public health. Meteorologists are involved in environmental planning and regulation at the state and local levels. Power generation and fuel transmission industries, engineering firms, environmental consulting firms, insurance companies, major retailing businesses, as well as schools, colleges and research institutions employ meteorologists because of recognition of the involvement of the atmosphere in their activities.

FACILITIES

The Department of Marine, Earth and Atmospheric Sciences maintains an extensive inventory of both laboratory and field research equipment and facilities. The department has use of the R/V Cape Hatteras, a 135 ft. coastal zone research vessel. Specilized equipment available in the department are an X-ray fluorescence spectrometer, an X-ray diffractometer, neutron activation analysis equipment, geophysics instruments; (e.g., gravimeter, magnetometer, and seismic reflection equipment), radioisotope and stable isotope analytical equipment, a phytotron, a minicomputer/FAA 604 weather data line, CTD and hydrographics sampling systems and deep and shallow water moored instrumentation. Some of the specialized laboratories that are available in the department include an electron microprobe laboratory, sedimentology lab (microcomputer controlled grain-size analyzer) cloud-aerosol interaction lab, meterorology monitoring lab and satellite imaging lab. In addition to numerous microcomputers, the department maintains a VAX minicomputer with associated graphics devices and remote terminals in departmental labs and offices.

CURRICULA IN MARINE, EARTH AND ATMOSPHERIC SCIENCES

The B.A. and B.S. degree programs in geology require the same geology courses, but differ in their content of social science-humanities, mathematics, and collateral physical sciences. The B.A. program is designed to be similar to a bachelor's degree in geology obtained from other universities, while the B.S. program is more technically oriented, and similar to other curricula in the physical sciences at NCSU. The B.S. degree program in meteorology also follows the pattern of physical sciences curricula.

BACHELOR OF ARTS IN GEOLOGY

FRESHMAN YEAR			
<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ENG 111 Composition & Rhetoric	3	ENG 112 Composition & Reading	3
MA 112 Analytic Geometry & Calc. A	4	MA 212 Analytic Geometry & Calc. B	3
MEA 101 Gen. Physical Geology	3	MEA 202 Historical Geology	3
MEA 110 Physical Geology Lab	1	MEA 210 Historical Geology Lab	1
PE 100 Health & Physical Fitness	1	Humanities/Soc. Sci. Elective*	3
Humanities/Soc. Sci. Elective*	3	Physical Education Elective	1
	15		14

SOPHOMORE YEAR			
<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry I	4	CH 103 General Chemistry II	4
MEA 330 Crystallography & Mineralogy	3	MEA 331 Optical Mineral & X-Ray Diffr.	4
SP 110 Public Speaking	3	ST 311 Intro. to Statistics	3
Humanities/Soc. Sci. Elective*	3	Humanities/Soc. Sci. Elective*	3
Free Elective	3	Physical Education Elective	1
Physical Education Elective	1		15
	17		

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CSC 111 Intro. to FORTRAN Prog.	2	MEA 351 Structural Geology	4
ENG 321 Communication Tech. Info.	3	MEA 452 Sed. Petr. & Stratig.	4
MEA 440 Igneous & Metamorphic Petro.	4	PY 212 General Physics	4
PY 211 General Physics	4	Humanities/Soc. Sci. Elective*	3
Humanities/Soc. Sci. Elective*	3		15
	16		

SUMMER SESSION

MEA 465, 466 Geologic Field Camp I, II 6

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
MEA 423 Invertebrate Paleo. & Biostratig.	4	Earth Science Elective**	3
Earth Science Electives**	6	Humanities/Soc. Sci. Electives*	6
Humanities/Soc. Sci. Elective*	3	Free Electives	6
Free Elective	3		15
	16		
		Minimum Hours Required for Graduation	129

*A course in each of at least three humanities (fine arts, history, literature, language, philosophy, religion) and in each of at least three social sciences (anthropology, economics, political science, psychology, sociology). At least nine hours must come from courses beyond the introductory level.

**Earth science elective shall include at least one of the following: MEA 415, Geology of Metalliferous Deposits; MEA 461, Engineering Geology; MEA 470, Principles of Geophysics; MEA 522, Petroleum Geology.

BACHELOR OF SCIENCE IN GEOLOGY

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry I	4	CH 103 General Chemistry II or	
ENG 111 Composition & Rhetoric	3	CH 107 Prin. of Chemistry	4
MA 102 Analytic Geometry & Calc. I	4	ENG 112 Composition & Reading	3
MEA 101 General Physical Geology	3	MA 201 Analytic Geometry & Calc. II	4
MEA 110 Physical Geology Lab	1	MEA 202 Historical Geology	3
PE 100 Health & Physical Fitness	1	MEA 210 Historical Geology Lab	1
	16	Physical Education Elective	1
			16

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
MA 202 Analytic Geometry & Calc. III	4	MA 301 Applied Differential Equations I	3
MEA 330 Crystallography & Mineral.	3	MEA 331 Optical Mineral & X-ray Diffr.	4
PY 205 General Physics	4	PY 208 General Physics	4
SP 110 Public Speaking	3	Humanities Elective	3
Physical Education Elective	1	Physical Education Elective	1
	15		15

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 331 Introductory Physical Chemistry	4	CSC 111 Intro. to FORTRAN Prog.	2
ENG 321 Comm. of Tech. Info.	3	MEA 351 Structural Geology	4
MEA 440 Igneous & Metamorphic Petro.	4	MEA 452 Sed. Petr. & Stratig.	4
ST 361 Intro. to Stat. For Engr.	3	Soc. Sci. Elective	3
Humanities Elective	3	Free Elective	3
	17		16

SUMMER SESSION

MEA 465, 466 Geologic Field Camp I, II 6

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
MEA 423 Invertebrate Paleo. & Biostratig	4	Earth Science Electives**	6
Earth Science Elective**	3	Humanities/Soc. Sci. Elective	3
Social Sci. Elective	3	Technical Elective*	3
Technical Elective*	3	Free Elective	3
Free Elective	3		15
	16	Minimum Hours Required for Graduation	132

*The technical elective shall be at least two courses, not both at the introductory level, related to the geology curriculum such as: biological science, chemistry, civil engineering, computer science, economics, materials engineering, mathematics, meteorology, physics, soil science, statistics, etc.

**Earth science elective shall include at least one of the following: MEA 415, Geology of Metalliferous Deposits; MEA 461, Engineering Geology; MEA 470, Principles of Geophysics; ME 522, Petroleum Geology.

GEOPHYSICS OPTION, BACHELOR OF SCIENCE IN GEOLOGY

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry	4	CH 105 Chemistry Princ. & Appl.	3
ENG 111 Composition & Rhetoric	3	ENG 112 Composition & Reading	3
MA 102 Analytic Geometry & Calc. I	4	MA 201 Analytic Geometry & Calc. II	4
MEA 101 Physical Geol.	3	PY 201 General Physics**	4
MEA 110 Physical Geol. Lab	1	Physical Education Elective	1
PE 100 Health & Physical Fitness	1		15
	16		

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CSC 111 Intro. FORTRAN	2	CSC 302 Numerical Methods	3
MA 202 Analytic Geometry & Calc. III	4	MA 301 Applied Diff. Equations I	3
MEA 330A Cryst. & Mineralogy	2	PY 203 General Physics**	4
PY 202 General Physics**	4	Earth Science Elective	3
Humanities Elective	3	Humanities Elective	3
Physical Education Elective	1	Physical Education Elective	1
	16		17

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
MA 401 Applied Diff. Equations II	3	MEA 351 Structural Geology	4
MEA 470 Intro. Geophysics	3	MEA 452 Sed. Petrol. & Stratig.	4
MEA 440A Ign./Meta. Petrology	3	ST 361 Intro. Statistics	3
PY 411 Mechanics I	3	Social Sci. Elective	3
Social Sci. Elective	3	Free Elective	3
	15		17

SUMMER SESSION

MEA 475 Geophysical Field Methods	2
---	---

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
MEA 471 Exploration Geophysics	3	MEA 476 Seismic Exploration for Oil	3
PY 414 Electricity & Magnetism I	3	Earth Science Elective	3
Geophysics Elective	3	Humanities/Soc. Sci. Elective	3
Humanities/Soc. Sci. Elective	3	Technical Elective*	3
Free Elective	3	Free Elective	3
	15		15

Minimum Hours Required 128

*Technical electives constitute a minor field of emphasis. Among those recommended, are physics (PY 412, PY 413, PY 415), math (MA 405, MA 427-428, MA 501).

**Students transferring into the program may substitute PY 205, 208, 407 for the sequence PY 201, 202, 203. Geophysics elective to be chosen from MEA 415, MEA 461, or MEA 523.

BACHELOR OF SCIENCE IN METEOROLOGY

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry I	4	CH 105 Chemistry—Princp. & Appl.†	3
ENG 111 Composition and Rhetoric	3	ENG 112 Composition and Reading	3
MA 102 Analytic Geometry and Calc. I	4	MA 201 Analytic Geometry & Calc. II	4
PE 100 Health & Physical Fitness	1	PY 205 General Physics	4
Humanities Electives	3	Physical Education Elective	1
	15		15

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
MA 202 Analytic Geometry & Calc. III	4	MA 301 Applied Diff. Equa. I	3
MEA 311 Physical Climatology	3	MEA 312 Physical Meteorology	3
MEA 313 Meteorology Lab I	1	MEA 314 Meteorology Lab II	1
PY 208 General Physics	4	Approved Elective‡	3
Humanities Elective	3	Geophysical Sciences Elective††	3
Physical Education Elective	1	Humanities/Soc. Sci. Elective	3
	16	Physical Education Elective	1
			17

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CSC 111 Intro. to FORTRAN Program	2	MEA 405 Climatol. Data Analysis	3
MEA 421 Air Processes and Motions I	4	MEA 412 Atmospheric Physics	3
ST 361 Intro. Statistics	3	MEA 422 Air Processes & Motions II	4
Approved Elective‡	3	Communicative Arts Elective*	3
Communicative Arts Elective*	3	Free Elective	3
Free Elective	3		16
	18		

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
MEA 443 Weather Anly. & Fcstg. I	3	Approved Electives‡	6
MEA 455 Micrometeorology	3	Humanities/Soc. Sci. Elective	3
Approved Elective‡	3	Meteorology Technical Elective	3
Social Sci. Elective	3	Free Elective	3
Free Elective	3		15
	15		

Minimum Hours Required for Graduation 127

†Students who intend to take additional chemistry courses, or who plan technical electives which require additional chemistry, should add CH 104 or replace CH 105 with CH 103 or CH 107. Advanced transfer students are permitted to substitute mathematics, science, or engineering credits for CH 105.

††Geophysical sciences elective is selected from among MEA 101, MEA 120-110, MEA 200, PY 223, SSC 200, CE 201 or 370, FOR 272.

*Two courses in a foreign language, or one course each in speech and technical writing.

‡Approved elective constitutes a minor field of emphasis consisting of at least 15 credits in a single discipline or related disciplines. Among those available, but not limited to them, are: biometeorology, chemistry, computer science, environmental quality, geology-geophysics, hydrology, mathematics, physics, physical oceanography, statistics; several areas of engineering, agriculture, forestry; science education; weather communication.

‡‡Meteorology technical elective to be chosen from MEA 444 or MEA 556.

MATHEMATICS

Harrelson Hall (Room 360)

Professor E. E. Burniston, Head of the Department

Professor J. B. Wilson, Associate Head of the Department and Director of Undergraduate Instruction

Professor M. J. Evans, Director of Undergraduate Programs

Associate Professor H. A. Petrea, Director of Summer School

Professor J. A. Marlin, Scheduling Officer and Assistant Head of the Department

Professors: J. W. Bishir, S. L. Campbell, R. E. Chandler, J. M. A. Danby, J. C. Dunn, A. Fauntleroy, R. O. Fulp, R. E. Hartwig, K. Koh, J. R. Kolb, J. Luh, L. B. Martin, R. H. Martin, Jr., C. D. Meyer, Jr., P. A. Nickel, C. V. Pao, E. L. Peterson, R. J. Plemmons, M. Putcha, N. J. Rose, H. Sagan, C. E. Siewert, M. F. Singer, E. L. Stitzinger, R. A. Struble; Professors Emeriti: J. Levine, H. M. Nahikian, H. V. Park, H. E. Speece; Associate Professors: J. D. Cohen, L. O. Chung, G. D. Faulkner, J. E. Franke, C. T. Kelley, T. Lada, D. M. Latch, L. B. Page, H. A. Petrea, J. Roderiguez, E. Sachs, R. G. Savage, S. Schechter, J. F. Selgrade, M. Shearer, R. Silber, J. W. Silverstein, D. F. Ullrich, W. M. Waters, R. E. White; Associate Professor Emeritus: H. C. Cooke; Assistant Professors: R. Byers, H. J. Charlton, M. Chu, D. E. Garoute, G. H. Guirguis, D. J. Hansen, K. C. Misra, L. K. Norris, S. O. Paur, R. T. Ramsay, J. L. Rulla, S. J. Wright; Assistant Professors Emeriti: C. F. Lewis, J. L. Sox; Lecturers: E. L. Barnhardt, H. M. Batts, M. M. Cupitt, H. L. Davison, L. A. Eldridge, P. LeNoir, M. McCollum, J. E. Rohrbach, M. Schiermeier, M. W. Sikes, K. C. Trubey, L. Williams; Associate Members of the Department: H. van der Vaart, O. Wesler.

The undergraduate major in mathematics provides a core of basic mathematics courses along with flexible choices of electives which permit both a well-rounded education and preparation for math-related careers. Because of the current employment market (for both baccalaureate and graduate students), students are advised to give serious consideration to the applied mathematics option.

Career objectives can be directed toward employment in math-related jobs in business, industry, or government, teaching at the secondary school level, or graduate study in mathematics and/or related areas.

The Mathematics Department operates a Tutorial and Audio Visual Center. This center is one of the most advanced of its kind in the country, incorporating video systems whereby a student who has missed a particular lecture or would like to see and hear a lecture on a particular topic once again can do so. Teaching assistants of the Mathematics Department are also available in the center for tutoring services. The center also has Computer Assisted Instruction Systems which incorporate a computer with a video player. With this system, the student is able to test himself or herself. The test is graded by the computer and if the student fails the test, he or she can watch a short lecture on the relevant material.

At this time, the center has video tapes of most of our basic courses, including MA 111, MA 102, MA 201, MA 202, MA 301, MA 112, MA 113, MA 114, MA 115 and MA 122.

The director of the center is Professor R. G. Savage, who is recognized as being one of the leading experts in this mode of mathematics education. The center is open 11 hours a day and is located in Harrelson Hall.

HONORS AND AWARDS

The department recognizes its superior students with the following annual awards:

Hubert V. and Mary Alice Park Scholarship—An award made to an outstanding rising junior or senior in mathematics.

John W. Cell Scholarships—Two awards for outstanding rising juniors and/or seniors in mathematics.

Carey Mumford Scholarship—An award to an outstanding sophomore, junior or senior in mathematics.

Levine-Anderson Award—An award for that student who has the best performance in the William Lowell Putnam Examination. (This award is not restricted to mathematics majors).

The department also has a chapter of the National Mathematical Honorary Fraternity Pi Mu Epsilon. Membership is open to those students with superior performance in mathematics courses. Professor Robert Silber is currently the faculty advisor.

REQUIREMENTS FOR BACHELOR OF SCIENCE IN MATHEMATICS

Required Mathematics Courses (credits)

- MA 102-201-202 Analytic Geometry and Calculus I, II, III
- MA 225 Structure of the Real Number System
- MA 301 Applied Differential Equations I
- MA 403M Introduction to Modern Algebra
- MA 405M Introduction to Linear Algebra and Matrices
- MA 425-426 Mathematical Analysis I, II

Mathematics Electives (12 credits)

Twelve (12) credits of approved mathematics courses at 400-500 levels.

Science and Mathematics-related Requirements (17-18 credits)

- CH 101 General Chemistry I
- CSC 101 Intro. to Programming or CSC 111 Intro. to FORTRAN
- ST 371-372¹ or MA 421 Intro. to Probability
- PY 205-208 (or PY 201-202) General Physics

Science and Math-related Electives (12 credits)²

- (1) At least 6 additional credits of physical science, engineering science, or life science (6-12 credits)
- (2) Additional courses in computer science and/or statistics (0-6 credits)

Required Humanities (15 credits)

- English 111, 112
- English or American Literature—one semester
- Introductory History—one semester
- Foreign Language—completion of the intermediate course no. 201³

Humanities/Social Sciences Electives (18 credits)

At least six (6) of the eighteen credits must be at the 300 or above.

Physical Education (4 credits)

Free Electives (17-18 credits)

Minimum Hours Required for Graduation 126

¹If ST 371-372 are chosen, 3 of the credits can be applied in the 12 credit category, Science and Math-related electives.

²These elective courses require the approval of the student's advisor.

³Preliminary courses (e.g. FL 102) taken in the process of satisfying this requirement will be counted as free electives.

REQUIREMENTS FOR APPLIED MATHEMATICS OPTION

Required Mathematics Courses (33 credits)

- MA 102-201-202 Analytic Geometry and Calculus I, II, III
- MA 225 Structure of the Real Number System
- MA 301 Applied Differential Equations I
- MA 403M Introduction to Modern Algebra
- MA 405M Introduction to Linear Algebra and Matrices
- MA 425-426 Mathematical Analysis I, II
- MA 430 or MA 432 Mathematical Models in the Physical Sciences (or in Life Sciences, Social Sciences and Economics)

Mathematics Electives (6 credits)

Six (6) credits of approved mathematics courses at 400-500 levels.

Science and Mathematics-related requirements (17-18 credits)

- CH 101 General Chemistry I
- CSC 101 Intro. to Programming or CSC 111 Intro. to FORTRAN
- ST 371-372¹ or MA 421 Intro. to Probability
- PY 205-208 (or PY 201-202) General Physics

Applied/Career-oriented electives (15 credits)

- (1) Twelve (12) credits² (in depth) in one math-related or career-oriented area;
- (2) Three (3) additional credits in science or ST 372 or an approved 400-500 math elective if the 12 credits in (1) are all in science.

Required Humanities (15 credits)

- English 111, 112
- Literature—one semester
- Introductory History—one semester
- Foreign Language—completion of the intermediate course no. 201³

Humanities/Social Sciences Electives (18 credits)

At least six (6) of the eighteen credits must be at the 300 or above.

Physical Education and Free Electives (21-22 credits)

- PE 100 Health & Physical Fitness
- Physical Education Electives (3 credits)
- Free Electives (17-18 credits)

Minimum Hours Required for Graduation 126

¹If ST 371-372 are chosen, 3 of the credits can be applied to item (2) of Applied/Career-oriented Electives.

²These elective courses require the approval of student's advisor.

³Preliminary courses (e.g. FL 102) taken in the process of satisfying this requirement will be counted as free electives.

SAMPLE PROGRAM IN MATHEMATICS

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry I	4	CSC 101 Intro. to Programming	3
ENG 111 Composition and Rhetoric	3	ENG 112 Composition & Reading	3
MA 102M Analytic Geometry & Calc. I	4	MA 201M Analytic Geometry & Calc. II	4
PE 100 Health & Physical Fitness	1	Foreign Language	3
Introductory History	3	Science/Math-related Elective	3-4
	15	Physical Education Elective	1
			17-18

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
MA 202M Analytic Geometry & Calc. III	4	MA 301 Applied Differential Equations I	3
MA 225 Mathematical Analysis I	3	MA 403M Intro. to Modern Algebra	3
PY 205 General Physics	4	PY 208 General Physics	4
Literature	3	Humanities/Soc. Sci. Elective	3
Science/Math-related Elective	3	Free Elective	3
Physical Education Elective	1	Physical Education Elective	1
	18		17

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
MA 405M Intro. Linear Algebra & Matrices	3	MA 421 Intro. to Probability	3
MA 425 Mathematical Analysis I	3	MA 426 Mathematical Analysis II	3
Humanities/Soc. Sci. Electives	3	Humanities/Soc. Sci. Elective	3
Science/Math-related Elective	3	Science/Math-related Elective	3
Free Elective	3	Free Elective	3
	15		15

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
Humanities/Soc. Sci. Electives	6	Humanities/Soc. Sci. Elective	3
Mathematics Electives	6	Mathematics Elective*	3
Free Elective	3	Mathematics Elective	3
	15	Free Electives	6
			15

Minimum Hours Required for Graduation 126

*Replace by MA 430 or MA 432 for the applied mathematics option.

PHYSICS

Cox Hall (Room 105)

Professor R. R. Patty, Head of Department

Professor G. E. Mitchell, Associate Department Head

Professor C. R. Gould, Coordinator of Advising

Professors: K. T. Chung, S. R. Cotanch, W. R. Davis, W. O. Doggett, R. E. Fornes, C. R. Gould, G. L. Hall, A. W. Jenkins, C. E. Johnson, G. H. Katzin, Fred Lago, G. Lucovsky, J. D. Memory, G. E. Mitchell, J. Y. Park, R. R. Patty, J. S. Risley, D. E. Sayers, J. F. Schetzina, L. W. Seagondollar, D. R. Tilley, A. W. Waltner; *Adjunct Professors:* J. Narayan, J. M. Zavada; *Professors Emeriti:* W. H. Bennett, J. T. Lynn, A. C. Menius, Jr., E. R. Manring, L. H. Thomas; *Associate Professors:* G. C. Cobb, D. G. Haase, K. L. Johnston, M. A. Klenin, J. R. Mowat, M. A. Paesler, G. W. Parker; *Adjunct Associate Professors:* D. C. Koningsberger, A. S. Schlachter; *Associate Professor Emeritus:* D. H. Martin; *Assistant Professors:* J. W. Cook, S. P. Reynolds, W. B. Westerveld; *Assistant Professor Emeritus:* H. L. Owen; *Associate Members of the Department:* J. M. A. Danby (Mathematics), D. L. Ridgeway (Statistics).

Physics is the fundamental science of observation, measurement and mathematical description of nature. In addition to establishing basic knowledge of physical phenomena,

physics provides the foundation for modern technology. Contributions by physicists are wide ranging: discovery of elementary particles, invention and use of instruments to investigate interplanetary space, study of processes fundamental to the release of thermo-nuclear energy, development of lasers and solid state devices, research on the structure and interaction of nucleons, nuclei, atoms, molecules, and ions.

PROGRAMS

The Physics Department offers a program of study at the undergraduate level which provides the student with a strong fundamental background and with course options allowing deeper study of selected areas of individual interest. At the graduate level, a comprehensive fundamental preparation is followed by specialization and research in one of the following areas: atmospheric, atomic, nuclear, nuclear magnetic resonance, plasma, relativity and solid state physics. (See listing of graduate degrees and consult the Graduate Catalog.)

PHYSICS CURRICULUM

The undergraduate curriculum in physics provides the basic training for a career in physics or for graduate study. The curriculum leads to a Bachelor of Science in Physics.

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry I	4	CH 107 Principles of Chemistry	4
ENG 111 Composition & Rhetoric	3	ENG 112 Composition & Reading	3
MA 102 Analytic Geometry & Calc. I	4	MA 201 Analytic Geometry & Calc. II	4
PE 100 Health & Physical Fitness	1	PY 201 General Physics	4
PY 101 Perspectives on Physics	1	Physical Education Elective	1
Humanities/Soc. Sci. Elective	3		16
	16		

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
MA 202 Analytic Geometry & Calc. III	4	MA 301 Applied Differential Equations I	3
PY 202 General Physics	4	MA 405 Linear Algebra Matrices	3
Humanities/Soc. Sci. Elective	3	PY 203 General Physics	4
Free Elective	3	Humanities/Soc. Sci. Elective	3
Physical Education Elective	1	Free Elective	3
	15	Physical Education Elective	1
			17

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
MA 401 Applied Differential Equations II	3	ENG 321 Comm. of Technical Inform.	3
PY 411 Mechanics I	3	PY 412 Mechanics II	3
PY 414 Electricity & Magnetism I	3	PY 413 Thermal Physics	3
PY 451 Electronics for Physicists	3	PY 415 Electricity & Magnetism II	3
Free Elective	3	Humanities/Soc. Sci. Elective	3
	15		15

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
PY 401 Modern & Quantum Physics I	3	PY 402 Modern & Quantum Physics II	3
PY 452 Advanced Physics Lab	1	PY 452 Advanced Physics Lab	1
Humanities/Soc. Sci. Elective	3	Humanities/Soc. Sci. Elective	3
Technical Electives	6	Technical Electives	6
Free Elective	3	Free Elective	3
	16		16

Minimum Hours Required for Graduation 126

*Technical or science electives (above 299 level)

STATISTICS

Cox Hall (Room 110)

Professor D. L. Solomon, Head of the Department

Professor J. L. Wasik, Undergraduate Administrator

Professors: B. B. Bhattacharyya, P. Bloomfield, C. C. Cockerham, A. R. Gallant, T. M. Gerig, F. G. Giesbrecht, H. J. Gold, T. Johnson, A. R. Manson, L. A. Nelson, C. H. Proctor, C. P. Quesenberry, J. O. Rawlings, D. L. Ridgeway, H. R. van der Vaart, B. S. Weir, O. Wesler; *Adjunct Professor:* A. L. Finkner; *Professors Emeriti:* A. H. E. Grandage, R. J. Hader, D. W. Hayne, F. E. McVay, D. D. Mason, R. J. Monroe, J. A. Rigney, R. G. D. Steel; *Associate Professors:* R. L. Berger, D. D. Boos, C. Brownie, K. P. Burnham (USDA), D. A. Dickey, E. J. Dietz, A. C. Linnerud, J. F. Monahan, K. H. Pollock, T. W. Reiland, W. H. Swallow; *Adjunct Associate Professors:* H. T. Bhattacharyya, J. R. Chromy, J. H. Goodnight; *Assistant Professors:* S. P. Ellner, F. M. Guess, D. W. Nychka, S. G. Pantula, C. E. Smith, L. A. Stefanski, B. J. Stines; *Senior Statisticians:* S. B. Donaghy, D. W. Turner; *Associate Statisticians:* W. L. Cornelius, H. K. Hamann (and lecturer); *Assistant Statisticians:* P. L. Marsh, F. T. Wang; *Associate Members of the Statistics Faculty:* T. H. Emigh (Genetics), M. M. Goodman (Crop Science), W. L. Hafley (Forestry); *Associate Members of the Biomathematics Faculty:* J. W. Bishir (Mathematics), G. Namkoong (Genetics), L. A. Real (Zoology), H. E. Schaffer (Genetics), R. E. Stinner (Entomology); *Adjunct Professor of Biomathematics:* M. W. Anderson.

Statistics is the body of scientific methodology which deals with the logic of experiment and survey design, the efficient collection and presentation of quantitative information, and the formulation of valid and reliable inferences from sample data. The computer is used as a research tool by the statistician to perform the tasks of management and analysis of data collected from experiments and surveys.

The Department of Statistics is part of the Institute of Statistics, which includes Departments of Biostatistics and Statistics at Chapel Hill. The Department of Statistics provides instruction, consultation and computational services on research projects for other departments of all schools at North Carolina State University including the Agricultural Research Service. Department staff are engaged in research in statistical theory and methodology. This range of activities furnishes a professional environment for training students in the use of statistical procedures in the physical, biological and social sciences, and in industrial research and development.

OPPORTUNITIES

The importance of sound statistical thinking in the design and analysis of quantitative studies is generally recognized and is reflected in the abundance of job opportunities for statisticians. Industry relies on statistical methods to control the quality of goods in the process of manufacture and to determine the acceptability of goods produced. Statistical procedures based on scientific sampling have become basic tools in such diverse fields as weather forecasting, opinion polling, crop and livestock estimation, and business trend prediction. Because one can improve the efficiency of use of increasingly complex and expensive experiment and survey data, the statistician is in demand wherever quantitative studies are conducted.

SCHOLARSHIPS AND AWARDS

The Department of Statistics recognizes the importance of superior academic performance through the awarding of scholarships and certificates of merit. Two scholarships are available for the freshman year for the purpose of attracting academically superior students. The North Carolina State University Chapter of Mu Sigma Rho, the national statistics honorary fraternity, accepts as members students who have had superior performance in statistics courses. Also, the outstanding senior statistics student is recognized through the award of a certificate and a year's subscription to a leading statistics journal.

STATISTICS CURRICULUM

The undergraduate curriculum provides basic training for a career in statistics or for graduate study and leads to a bachelor of science in statistics. In addition to statistics, the curriculum includes study in mathematics, computer sciences, and the biological/physical sciences. While fulfilling their major elective requirements students can either elect a minor or distribute their study across fields exploring the application of statistics in other

fields such as agriculture and life sciences, computer science, economics and business, industrial engineering, and the social sciences. A cooperative work-study option is also available.

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CSC 200 Introduction to Computers	3	CSC 101 Introduction to Programming	3
ENG 111 Composition and Rhetoric	3	EB 201 Economics I	3
MA 102 Analytic Geometry & Calc. I	4	ENG 112 Composition and Reading	3
PE 100 Health & Physical Fitness	1	MA 201 Analytic Geometry & Calc. II	4
ST 101 Statistics by Example	3	Humanities/Soc. Sci. Elective ¹	3
	<u>14</u>	Physical Education Elective	1
			<u>17</u>

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
MA 202 Analytic Geometry & Calc. III	4	MA 405 Intro. to Linear Alg. & Mat.	3
PSY 200 Introduction to Psychology or		ST 302 Statistical Methods II	3
SOC 202 Principles of Sociology	3	Economics or Accounting Elective ³	3
ST 301 Statistical Methods I	3	Science Elective ²	3-4
Humanities/Soc. Sci. Elective ¹	3	Free Elective	3
Science Elective ²	4	Physical Education Elective	1
Physical Education Elective	1		<u>16-17</u>
	<u>18</u>		

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ENG 321 Communication of Technical Info.	3	SP 110 Public Speaking	3
ST 401 Basic Statistical Analysis I	3	ST 402 Basic Statistical Analysis II	3
Major Elective ⁴	3	Humanities/Soc. Sci. Elective ¹	3
Science Elective ²	4	Major Elective ⁴	3
Free Elective	3	Science Elective ²	3-4
	<u>16</u>		<u>15-16</u>

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ST 421 Intro. to Math. Statistics I	3	ST 422 Intro. to Math Statistics II	3
ST 432 Intro. to Sampling	3	ST 431 Industrial Statistics	3
Humanities/Soc. Sci. Elective ¹	3	Major Elective ⁴	3
Major Elective ⁴	3	Major Elective ⁴	3
Free Elective	3	Free Elective	3
	<u>15</u>		<u>15</u>

Minimum Hours Required for Graduation 126

¹Six credits of humanities/social sciences elective requirements must be at the 300/400 level.

²Two sequences selected from among BS 100 & BO 200 or ZO 201; CH 101-107; MEA 101 with 110 and MEA 201 or MEA 202; PY 205, 208. At least one year CH or PY.

³ACC 280 or EB 202 or EB 300 level course except EB/ST 350.

⁴The major elective courses require the approval of student's adviser. See department for list of suggested major electives.

D grades not accepted in any ST course, in any MA course, in any major elective or in CSC 101.

SCHOOL OF TEXTILES

Nelson Textile Building and David Clark Laboratories

D. S. Hamby, *Dean*

P. L. Grady, *Associate Dean*

W. K. Walsh, *Associate Dean, Research and Graduate Studies*

M. H. Mohamed, *Associate Dean, Academic Programs*

C. L. Barton, *Assistant to the Dean, Student Services*

B. Best-Nichols, *Librarian, Burlington Textiles Library*

The field of textiles is broad. It covers almost every aspect of our daily lives—with applications in medicine, space, recreation and sports, personal safety, environmental improvement and control, transportation, household and apparel uses. These versatile materials—textiles—are made to design specifications by a variety of modern high speed processes, utilizing tools such as lasers, electronics and computers. Textiles begin with the synthesis of fibers by man or by nature; it carries through a myriad selection of processes for fabric formation, including the steps necessary to make fabrics useful, such as the manufacture of dyestuffs and colorants, chemical auxiliaries and finishes, cutting and fashioning into end-use products.

The approximately 5,000 graduates of the School of Textiles hold diverse positions, mostly in North Carolina. In the textile and related industries, occupations range from manufacturing management, sales, corporate management, designing and styling, research and development and technical service to quality control and personnel management. These textile graduates are in the creative and management decision-making aspects of the industry. They plan the flow of materials and machines. They create new products and processes. They solve product and process problems. They create styles, designs, patterns, colors, textures, and structures for apparel, home and industrial uses. They engineer the systems and products required of industrial, space, medical, apparel and other uses of textile products. They deal with computers, automation, product quality, plant performance and environmental problems. They manage large and small companies, personnel, and systems.

The School of Textiles prepares young people for careers in the above occupations. A broad background is stressed; two-thirds of the course work normally comes from other departments of the university. Opportunities remain excellent, with the school maintaining one of the university's best placement records. Demand for textile graduates from North Carolina State University is particularly strong, due mainly to the strength of the academic programs. These programs are organized in three departments: Textile Chemistry, Textile Engineering and Science, and Textile Management and Technology.

CURRICULA

The School of Textiles offers a broad choice of curricula depending upon individual interests. Bachelor of Science programs in textiles, textile management, textile science or in textile chemistry permit a broad choice of courses in addition to required core courses. A Bachelor of Science in Textiles Engineering offered jointly by the School of Textiles and the School of Engineering is also available. The student's curriculum includes humanities, social sciences and basic sciences and may include a concentration in business economics, industrial engineering, textile engineering, mathematics, physics, chemistry, computer science, statistics, textile chemistry, or textile technology. The structure of the course sequence may allow graduate study in either the field of concentration or in the textile major. It is possible, with one semester of extra work, to obtain a double degree, for example in textile science and textile chemistry.

Inasmuch as professional textiles work is concentrated in the last two years of the student's program, it is possible for students from junior or community colleges, or other institutions of higher learning, to transfer to the School of Textiles with a minimum loss of time.

FIELD TRIPS

For certain textile courses, it is desirable for the student to see the manufacturing process under actual operating conditions. When possible, student groups visit outstanding manufacturing plants. Trip participation is required; transportation costs and other travel expenses, while held to a minimum, are paid by the student.

SUMMER EMPLOYMENT

Job opportunities for summer employment are available for textile students. Placement assistance is available through the school placement office and frequently can be arranged in the student's home community. Qualified students may arrange to receive academic credit for faculty-approved summer jobs.

DEGREES

Upon completion of programs in either textiles, textile management, textile science, textile chemistry or textiles engineering, the degree of Bachelor of Science is conferred.

The School of Textiles offers the following graduate degrees: Master of Textiles; Master of Science in Textiles or in Textile Chemistry; and Doctor of Philosophy in Fiber and Polymer Science. For general requirements consult the Graduate Catalog.

By faculty agreement candidates for the Doctor of Philosophy degree in other schools of this institution may specialize in essentially textile-related subjects. In such cases, research is usually done in textiles.

FOUR-ONE PROGRAM

The School of Textiles has a program which permits a student with a baccalaureate degree from an accredited college or university to complete the requirements for a Bachelor of Science degree in textiles, textile management, textile science or textile chemistry after the satisfactory completion of one year of study.

Applicants should have completed basic business economics, mathematics, physics and chemistry comparable to that required in all of the basic textile curricula. Under these conditions, the student may complete the degree requirements in two summer sessions and two regular semesters. Students not meeting specific requirements in business economics, sciences, or mathematics should remove deficiencies prior to entering a specific degree program, otherwise the program of study may require three or more semesters.

Each applicant's undergraduate program is considered individually and, in general, a complete transfer of credits is possible.

HONORS PROGRAM

This program offers the exceptional student an opportunity to penetrate deeply into an area of special interest with exposure to various forms of research or independent study. Academically-promising entrants to the school, and students who show academic excellence during the freshman year, are assigned to honors advisers and are regarded as honors candidates. Special lectures, discussion groups and seminars in the freshman and sophomore years introduce the possibilities for future development in the honors program. Towards the end of the freshman year, selected honors candidates are invited to become full members of the honors program. In the sophomore year, with honors adviser's consent, honors students may begin to develop programs of strength in a special interest area. This may necessitate the substitution of preferred courses for those normally required, with the exception of certain basic textile courses. In the junior and senior year the student develops special interests, culminating in an honors thesis. The honors thesis ranges from a scholarly review of a special topic to a discussion of an experimental research problem.

HONOR SOCIETY

Sigma Tau Sigma is the scholastic textile fraternity which was founded in the School of Textiles in 1929 to honor students who have a grade point average of 3.25 or higher. The main goal of this fraternity is to create a high standard of scholarship among textile students. Twice every year the local chapter selects as its prospective members junior textile students who meet the above criteria. Sigma Tau Sigma also promotes excellence by awarding a trophy to the graduating senior with the highest overall grade point average in the school.

TEXTILE SCHOLARS IN RESIDENCE PROGRAM

This program is sponsored by the School of Textiles and the Division of Student Affairs. It is a four-year program with emphasis on a textile seminar series and educational and cultural enrichment activities. These co-curricular activities include seminars on special topics related to the textile curriculum and profession, tutorial sessions, field trips and musical and drama performances. Students are invited to join this program after their acceptance at NCSU based on their predicted performance and must maintain a GPA of 3.0 to continue. All students are housed together; upperclassmen living with freshmen whenever possible.

ASSOCIATE OF THE TEXTILE INSTITUTE (ATI) DIPLOMA

The Textile Institute with headquarters in Manchester, England is a very prestigious international professional textile organization. This organization recognizes graduates from most of the School of Textiles programs who have achieved a GPA of 2.8 or higher. These graduates will be granted full exemption from the ATI examination.

SCOTTISH COLLEGE OF TEXTILES EXCHANGE PROGRAM

Selected students enrolled in the textile design concentration with junior standing are given the opportunity to spend the spring semester of the junior year at the Scottish College of Textiles while registered for textile design courses at NCSU. Tuition fees are paid at the regular rate to NCSU, travel costs for the selected students will be funded through the Louis Cramer Award in Textile Design which is administered by the School of Textiles. Each student will be responsible for costs of accommodations, meals and other personal needs.

Similar arrangements are available for students of the Scottish College of Textiles. The total exchange program is limited to 12 credit hours.

SILVER DESIGN MEDAL OF THE ROYAL SOCIETY OF ARTS, LONDON

The Royal Society of Arts, London has selected North Carolina State University as one of the universities eligible to award its silver medal to one graduate each year. This award is given to a student who demonstrates excellence in the field of textile styling/design and is presented at the May Commencement ceremonies.

SCHOLARSHIPS

The Directors of the North Carolina Textile Foundation and friends of the School of Textiles have established an outstanding freshman scholarship program for textile majors:

Textile Foundation Merit Awards—These scholarships are renewable for up to four years of study at \$3,500 per year, constituting an overall award of \$14,000. A tuition differential will be added to the award for an out-of-state student. Four recipients are chosen every year.

Charles and Abraham Erlanger Merit Award—One renewable scholarship for \$3,500 per year, for a total award value of \$14,000.

Charles A. Hayes Merit Award—One renewable scholarship for \$3,500 per year, for a total award value of \$14,000.

Textile Freshman Prestige Scholarships—Up to twenty of these fine scholarships will be awarded to members of the 1986-87 class. Ranging from \$1,000 to \$2,000 per year, these scholarships are renewable for up to four years.

COOPERATIVE EDUCATION PROGRAM

This is a voluntary program which combines academic study with job experience. The basic requirements of the program include having completed two semesters at NCSU (one semester for transfer students) and cumulative GPA of 2.25. The program provides for alternating semesters of full-time study and full-time work. A minimum of three work periods is required to complete the program.

FACILITIES

The School of Textiles is housed in Nelson Textile Building and David Clark Laboratories. These two buildings house one of the most modern, best equipped textile institutions.

David Clark Laboratories houses the Textile Chemistry Department, offices, classrooms, laboratories and pilot facilities for instruction and research. Radiation facilities include a 500 KV Electron Accelerator and a high-intensity ultraviolet irradiator.

Equipment is available for ultraviolet, visible, infrared, nmr and esr spectroscopy, reflectometry, colorimetry, viscometry, chromatography, differential thermal analysis, thermal gravimetric analysis, differential scanning calorimetry, instrumental measurement of color and computer color matching. Common testing equipment used for the evaluation of the physical properties of textile materials and for determining the color fastness, wash fastness, etc., of fibers and fabrics is also available. Complete pilot plant facilities allow demonstration of wet-processing operations used in textiles.

Nelson Textile Building houses the school's administration offices, the Textile Engineering and Science Department, the Textile Management and Technology Department, Textile Extension and the Burlington Textiles Library, which is a division of the D. H. Hill Library. The building houses offices, classrooms and laboratories for instruction and research. The laboratory areas include facilities for processing short and long staple natural and synthetic fibers, throwing and texturing continuous filament yarns, yarn preparation systems, study of the formation of various woven, knitted and non-woven fabrics, fabric design and apparel manufacturing. The department has extensive facilities for physical testing of fiber, yarns and fabrics, as well as textile physics and mechanics laboratories which include equipment designed for studying such specialized textile problems as those involving their static, dynamic and mechanical properties, their thermal properties, and their electrical properties.

SPECIAL SERVICES

The School of Textiles offers several services and programs which enrich its academic programs.

Textile Research is conducted on a wide variety of problems relating to the fiber, textile and apparel industries. Frequently the problems are interdisciplinary and involve team effort. Students have an opportunity to participate in the solution to current problems.

Textiles Extension and Continuing Education is vigorously engaged in by all faculty. It serves the needs of the textile industry by disseminating research findings and offering short courses for executive, scientific and supervisory personnel. The two-way exchange in these activities keeps students and faculty informed on all of the latest developments.

The Office of Student Services is responsible for the placement and financial aid programs of the School of Textiles. The placement function makes available to a potential employer the credentials of our students for permanent and summer employment and in a great number of cases performs equally for alumni.

The financial aid function operates by committee and makes it possible for any North Carolina student to pursue an education in textiles through scholarships, loans or grants as long as one maintains the university's academic and moral standards.

TEXTILE CHEMISTRY

David Clark Laboratories (Room 115)

Professor C. D. Livengood, Head of the Department

Associate Professor G. N. Mock, Assistant Head and Graduate Administrator

Professors: D. M. Cates, J. A. Cuculo, R. D. Gilbert, R. McGregor, M. H. Theil, C. Thomasino, W. K. Walsh; *Adjunct Professors:* R. J. Ambrose, F. I. Carroll, J. E. Hendrix, T. Iijima, J. B. Levy, E. E. Magat, H. F. Mark, A. Schindler; *Professors Emeriti:* K. S. Campbell, H. A. Rutherford, W. M. Whaley, R. W. Work; *Associate Professors:* K. R. Beck, H. S. Freeman, C. B. Smith; *Adjunct Associate Professor:* B. G. Frushour; *Associate Professors Emeriti:* T. H. Guion, A. C. Hayes; *Assistant Professor:* J. W. Rucker; *Adjunct Assistant Professor:* W. R. Martin, Jr.

The field of textile chemistry embraces a number of disciplines and is concerned, in part, with those industrial processes that constitute the final steps in the preparation of textile materials for the consumer. Common terms applied to these processes are scouring, bleaching, printing, dyeing and finishing. Textile chemistry is also concerned with fiber-forming polymers and other types of polymers, both natural and man-made, and how the chemical and physical properties of such materials vary with structure. Students receive a fundamental knowledge of the underlying principles that relate to this derivative field and a perspective that includes the many interacting factors involved in the preparation and conversion of starting materials to useful products.

CURRICULA IN TEXTILE CHEMISTRY

The department has three undergraduate curricula leading to a Bachelor of Science degree: (a) Dyeing and Finishing Operations, (b) Dyeing and Finishing Science, and (c) Polymer Chemistry. The first concentration is primarily for students who wish a terminal Bachelor of Science degree, whereas the other concentrations are oriented toward advanced studies. However, the student taking dyeing and finishing operations can use elective courses to achieve a background suitable for graduate studies if one wishes to do so.

See listing of graduate degrees offered and consult the Graduate Catalog.

DYEING AND FINISHING OPERATIONS CONCENTRATION

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry I	4	CH 107 Principles Chemistry	4
ENG 111 Composition & Rhetoric	3	CSC 200 Intro. to Comp. & Use	3
MA 112 Analytic Geometry & Calc. A	4	ENG 112 Composition & Rhetoric	3
PE 100 Health & Physical Fitness	1	MA 212 Analytic Geometry & Calc. B	3
T 105 Intro. Text. Mat. Sci.	3	T 203 Intro. to Polymer Chem.	3
	15	Physical Education Elective	1
			17

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 221 Organic Chem. I	4	CH 223 Organic Chem. II	4
T 211 Intro. to Fiber Sci.	3	PY 211 General Physics	4
T 220 Yarn Prod. System	3	T 250 Fabric Form. Systems	3
TC 210 Textile Preparation	3	TC 330 Textile Finishing	3
Humanities/Soc. Sci. Elective	3	Free Elective	3
Physical Education Elective	1	Physical Education Elective	1
	17		18

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
PY 212 General Physics	4	TC 305 Intro. Col. or Sci. Appli.	2
TC 320 Text. Dye & Print.	4	TC 412 Text. Chem. Analysis	3
TC 441 Phys. Chem. Proc. Tex. I	3	TC 442 Phys. Chem. Proc. Text. II	3
TC 461 Intro. to Fib-Form. Pol.	3	Humanities/Soc. Sci. Elective	3
Humanities/Soc. Sci. Elective	3	Free Elective	3
	<u>17</u>		<u>14</u>

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
TC 405 Chem. & Phy. Eval. Text.	3	TC 406 Text. Chem. Tech. Lab	2
Humanities/Soc. Sci. Electives	6	TC 491 Seminar in TC	1
Physical Sci./Math Elective ³	3	Humanities/Soc. Sci. Elective	3
T or TC Elective ¹	2	T or TC Elective ¹	3
TES or TMT Elective ²	3	TES or TMT Elective ²	3
	<u>17</u>	Free Elective	3
			<u>15</u>

Minimum Hours Required for Graduation 130

¹Any T or TC elective course

²Any TES or TMT elective course

³Physical sci./math elective: ST 361, CH elective, Math elective

DYEING AND FINISHING SCIENCE CONCENTRATION

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry I	4	CH 107 Principles Chemistry	4
ENG 111 Composition & Rhetoric	3	CSC 200 Intro. to Comp. & Use	3
MA 102 Analytic Geometry & Calc. I	4	ENG 112 Composition & Rhetoric	3
PE 100 Health & Physical Fitness	1	MA 201 Analytic Geometry & Calc. II	4
T 105 Intro. Text. Mat. Sci.	3	T 203 Intro. to Pol. Chem.	3
	<u>15</u>	Physical Education Elective	1
			<u>18</u>

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 221 Organic Chemistry I	4	CH 223 Organic Chemistry II	4
MA 202 Analytic Geometry & Calc. III	4	MA 301 Appl. Diff. Equat.	3
T 250 Fab. Form. Systems	3	PY 205 General Physics	4
TC 210 Text. Preparation	3	TC 330 Text. Finishing	3
Free Elective	3	Physical Education Elective	1
Physical Education Elective	1		<u>15</u>
	<u>18</u>		

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
PY 208 General Physics	4	T 211 Intro. to Fiber Sci.	3
T 220 Yarn Prod. Systems	3	TC 305 Intro. Col. or Sci. Appl.	2
TC 320 Text. Dye & Print.	4	TC 412 Text. Chem. Analysis	3
Humanities/Soc. Sci. Elective	3	Humanities/Soc. Sci. Elective	3
Phys. Chem/Thermo Elect.*	3	Phys. Chem/Thermo Elect.*	3
	<u>17</u>	Free Elective	3
			<u>17</u>

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
TC 405 Chem. & Phys. Eval. Text.	3	TC 406 Text. Chem. Tech Lab	2
TC 461 Intro. to Fib. Form. Pol.	3	TC 491 Seminar in TC	1
Dyeing/Finishing Elective***	2	Humanities/Soc. Sci. Electives	6
Humanities/Soc. Sci. Electives	6	Polymer Chem. Elective**	3
Polymer Chem. Elective**	3	Free Elective	3
	<u>17</u>		<u>15</u>

Minimum Hours Required for Graduation 132

*TC 441-442 or CH 431-433

**Any T, TES, TMT or TC polymer chemistry elective course

***Any TC dyeing/finishing elective course

POLYMER CHEMISTRY CONCENTRATION

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry I	4	CH 107 Principles of Chemistry	4
ENG 111 Composition & Rhetoric	3	ENG 112 Composition & Reading	3
MA 102 Analytic Geometry & Calc. I	4	MA 201 Analytic Geometry & Calc. II	4
PE 100 Health & Physical Fitness	1	T 203 Intro. to Pol. Chem.	3
T 105 Intro. Text. Mat. Sci.	3	Physical Education Elective	1
	<u>15</u>		<u>15</u>

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 221 Organic Chemistry I	4	CH 223 Organic Chemistry II	4
MA 202 Analytic Geometry & Calc. III	4	MA 301 Appl. Diff. Equat.	3
T 250 Fabric Form. System	3	PY 205 General Physics	4
T 301 Tech. Dyeing Finish.	4	T 211 Intro. to Fiber Sci.	3
Physical Education Elective	1	Humanities/Soc. Sci. Elective	3
	<u>16</u>	Physical Education Elective	1
			<u>18</u>

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
PY 208 General Physics	4	TC 305 Intro. Col. or Sci. Appl.	2
T 220 Yarn Prod. Systems	3	Humanities/Soc. Sci. Elective	3
TC 461 Intro. to Fib.-Form. Pol.	3	Phys. Chem/Thermo. Elect.***	3
Phys. Chem/Thermo Elect****	3	Physical Sci./Math Elective*	2-4
Free Elective	3	Polymer Chem. Elect.***	3
	<u>16</u>	Free Elective	3
			<u>16-18</u>

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
Dyeing Finishing Elective**	3	Dyeing Finishing Elect.**	3
Humanities/Soc. Sci. Electives	6	Humanities/Soc. Sci. Elective	6
Polymer Chemistry Elective***	6	Polymer Chem. Elect.***	3
Free Elective	3	Textiles Elective#	2-4
	<u>18</u>		<u>14-16</u>

Minimum Hours Required for Graduation 130

*Physical Sci./Math—2-4 credits from the following:

CH 315	4
CSC 111	2
CSC 101 + CSC 251	4
ST 361	3

****Dyeing and Finishing—6 credits from the following:**

T 401	3	TC 330	3	TC 505	3
T 506	3	TC 405	3	TC 520	3
TC 210	3	TC 406	2	TC 521	3
TC 306	1	TC 412	3	TC 530	3
TC 320	4	TC 415	3	TC 591	3
		TC 451	3		

*****Polymer Chemistry electives—nine credits from the following:**

T 402	3	TC 569	3
TC 504	3	TC 591 (Polymer Lab Course)	3
TC 561	3	TES 460	3
TC 562	3		

Three additional credits from either the list above or the following:

TC 490	1-6
TC 491	1
TC 591	3

******Physical Chemistry/Thermodynamics—6 credits from the following:**

CH 431	3	TC 441	3
CH 433	3	TC 442	3

#Textiles—4 credits in TC, TES, TMT or T courses at 300-500 level (including any elective course in dyeing and finishing or polymer chemistry listed above).

****Humanities/Social Science Electives—18 hours in addition to ENG 111 & 112. One EB course is required. The remaining courses should be selected from the list of electives approved by the Provost with a minimum of two electives in a graded sequence from the humanities area and two courses in a graded sequence from the social science area. A graded sequence is defined as: a) A two-course sequence in which the first course is prerequisite to the second; or b) A two-course sequence in which the second course is at a 300 level or higher.**

TEXTILE ENGINEERING AND SCIENCE

Nelson Textile Building (Room 103)

Professor S. P. Hersh, Head of the Department

Professor B. S. Gupta, Assistant Head and Graduate Administrator

Professors: S. K. Batra, D. R. Buchanan, T. W. George, P. L. Grady, B. S. Gupta, D. S. Hamby, S. P. Hersh, P. R. Lord, M. H. Mohamed; Adjunct Professors: K. E. Berger, R. W. Postelthwait, M. W. Suh; Professors Emeriti: C. M. Asbill, Jr., J. F. Bogdan, P. D. Emerson; Associate Professor: R. L. Barker; Adjunct Associate Professor: P. E. Sasser; Associate Professor Emeritus: T. G. Rochow; Assistant Professors: P. Banks-Lee, T. G. Clapp, H. Hamouda, R. H. Johnson; Instructors: A. C. Bullerwell, J. P. Rust.

The Department of Textile Engineering and Science offers two B.S. degrees, a B.S. in Textiles Engineering and a B.S. in Textile Science. The B.S. in Textiles Engineering provides a broad base of fundamental engineering courses as a foundation for advanced studies in textile engineering. The textile engineering courses deal with the application of scientific and engineering principles to the design and control of all aspects of fiber, textile and apparel processes, products and machinery. These include natural and man-made materials, interaction of materials with machines, safety and health, energy conservation, and waste and pollution control.

The B.S. in Textiles Engineering is offered jointly with the School of Engineering.

The textile science curriculum is based on a foundation both in textiles and in science. Science electives are designed to give a greater depth in one or more areas of science such as mathematics and statistics, mechanical and materials engineering, physics, computer science, chemistry, advanced textile operations, textile chemistry, industrial engineering or advanced economics. Textile science examines the physical and mechanical properties of textiles—and how their unique characteristics of strength, flexibility, light weight and elasticity can be utilized to meet the world's needs.

The department is also engaged in research supported by university funds and industrial and governmental sponsors. Faculty, graduate students and some undergraduate students (through the honors program) may participate in research.

B.S. DEGREE IN TEXTILE SCIENCE

FRESHMAN YEAR			
<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry I	4	CH 103 General Chemistry II or	
ENG 111 Composition & Rhetoric	3	CH 105 Chem. Princ. & Applic. or	
MA 102 Analytic Geometry & Calc. I	4	CH 107 Principles of Chemistry	3-4
PE 100 Health & Physical Fitness	1	ENG 112 Composition & Reading	3
T 105 Intro. Text. Mat. Sci.	3	MA 201 Analytic Geometry & Calc. II	4
	15	T 220 Yarn Product Systems	3
		Humanities/Soc. Sci. Elective	3
		Physical Education Elective	1
			17-18

SOPHOMORE YEAR			
<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
MA 202 Analytic Geometry & Calc. III	4	MA 301 Applied Diff. Equations I	3
PY 205 General Physics	4	PY 208 General Physics	4
T 203 Intro. to Polymer Chem.	3	ST 361 Intro. to Statistics*	3
T 250 Text. Fab. Form. Struct.	3	T 211 Intro. to Fiber Science	3
Humanities/Soc. Sci. Elective**	3	T 301 Tech. of Dyeing & Finish.	4
Physical Education Elective	1	Physical Education Elective	1
	18		18

JUNIOR YEAR			
<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CSC 111 Intro. Fortran Prog. I	2	ENG 321 Communicating Technical Info.	3
TES (TMT) 420 Mod. Dev. Yn. Mfg. Syst.** or		TES 305 Dir. Fiber-Fab. Prod.** or	
TES (TMT) 320 Mech. Sp. Yn. Mfg. Syst.**	3-4	TES (TMT) 351 Weaving Syst.**	3
TMT 341 Knitting Syst.** or		TES (TMT) 330 Text. Meas. & Qual. Cont.	4
TES (TMT) 351 Weaving Syst.**	3	Humanities/Soc. Sci. Elective**	3
Restricted Electives***	6	Restricted Electives***	5
Free Elective	3		18
	17-18		

SENIOR YEAR			
<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
TES 460 Phy. Prop. of Text. Fib.	3	TES (TMT) 425 Text. Yn. Prod. & Prop.** or	
Humanities/Soc. Sci. Electives**	6	TES (TMT) 420 Mod. Dev. Yn. Mfg. Syst.**	3
Restricted Elective***	3	TES 461 Mech. Prop. Fib. Stru.	3
Free Elective	3	Humanities/Soc. Sci. Elective**	3
	15	Restricted Elective***	3
		Free Elective	3
			15

Minimum Hours for Graduation 133

Note: Credit gained for MA 111, Algebra and Trigonometry, will be considered as excess credit and not applicable toward satisfying the 133 minimum hours required for graduation.

- *ST 361(T) recommended for Textile students
 - ***Humanities/Social Science Electives*—18 hours in addition to ENG 111 & 112. One EB course is required. The remaining courses should be selected from the list of electives approved by the Provost with a minimum of two electives in a graded sequence from the humanities area and two courses in a graded sequence from the social science area. A graded sequence is defined as: a) A two-course sequence in which the first course is prerequisite to the second; or b) A two-course sequence in which the second course is at a 300 level or higher.
 - ****Textile Electives*—12(13) hours
- Students have the option of selecting four courses, two from each grouping shown.
- | | | | |
|------------------------|---|---------------------|---|
| a. TES (TMT) 320 | 4 | b. TES 305 | 3 |
| TES (TMT) 420 | 3 | TES (TMT) 351 | 3 |
| TES (TMT) 425 | 3 | TMT 341 | 3 |

*****Restricted Electives*—17 hours

The restrictive electives are designed to give the student a greater science base in one or more areas. The 17 hours will be chosen from two or more of the groups of courses listed below. Maximum of 12 hours allowed from group F. Students are encouraged to elect TMT 380 from among the restricted electives.

Note: Some of the courses listed here have prerequisites which have not been specified in the detailed curriculum. They may be taken by the students either as free electives or for extra credit.

A. Math & Statistics
300 level and above

B. Mech. & Mat. Engr.
200 level and above

C. Physics
300 level and above

D. Computer Science
Any course except CSC 200

E. Chemistry
200 level and above

F. Advanced Textiles and Operations

- a. Textile (TES, TMT, TC, T) courses; i.e. TES 305, TMT 341, TES (TMT) 351, TMT 380, TC 320, TC 330, and any TES, TMT, TC or T course at the 400 level and above with the exception of T 491H and T 493.
- b. IE courses at 300 level or above except IE 301, 340, 341, 345 or 346.
- c. EB course: 301, 302, 404, 420, 422, 451 and all 500 level courses.

B. S. DEGREE IN TEXTILE ENGINEERING

See Textile Engineering under School of Engineering for curriculum.

TEXTILE MANAGEMENT AND TECHNOLOGY

Nelson Textile Building (Room 143)

Professor G. A. Berkstresser, Head of the Department

Associate Professor M. L. Robinson, Jr., Assistant Head of the Department

Professor P. A. Tucker, Graduate Administrator

Professors: A. H. El-Shiekh, A. B. Moss, W. C. Stuckey, Jr.; *Professors Emeriti:* E. B. Grover, J. A. Porter, W. E. Shinn; *Associate Professors:* R. A. Donaldson, P. B. Hudson, E. E. Hutchison, T. J. Little; *Adjunct Associate Professor:* D. M. Powell; *Associate Professors Emeriti:* E. H. Bradford, J. W. Klibbe, W. E. Moser, J. E. Pardue; *Assistant Professors:* A. C. Clapp, L. T. Lassiter, F. W. Massey, G. W. Smith; *Assistant Professors Emeriti:* H. M. Middleton, Jr., W. E. Smith; *Instructors:* C. L. Barton, J. B. Richard, D. O. Vess; *Associate Member of the Department:* S. Wilchins (Design).

The Department of Textile Management and Technology offers two B.S. degrees, a B.S. in Textile Management and a B.S. in Textiles.

The textile management curriculum combines a foundation both in textiles and in management principles and applications. Management electives include a sequence of courses in production factors, law and labor relations, management science mathematics, finance accounting, apparel, dyeing and finishing, textile design and textile operations.

The textiles curriculum is designed to provide a broad foundation in general textiles including fiber, yarn and fabric technology. Areas of concentration include textile operations, textile design, and apparel manufacturing. The department is also engaged in research supported by university funds and industrial and governmental sponsors. Faculty, graduate students and some undergraduate students may participate in research.

B.S. DEGREE IN TEXTILES, TEXTILE OPERATIONS CONCENTRATION

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry I	4	CH 103 General Chemistry II or	
ENG 111 Composition & Rhetoric	3	CH 107 Principles of Chemistry	4
MA 112 Analytic Geometry & Calc. A or		ENG 112 Composition & Reading	3
MA 102 Analytic Geometry & Calc. I	4	MA 212 Analytic Geometry & Calc. B or	
PE 100 Health & Physical Fitness	1	MA 201 Analytic Geometry & Calc. II	3-4
T 105 Intro. Text. Mat. Sci.	3	T 220 Yarn Prod. Systems	3
	15	Humanities/Soc. Sci. Elective**	3
		Physical Education Elective	1
			17-18

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CSC 200 Intro. to Computers	3	PY 212 (or 208) General Physics	4
PY 211 (or 205) General Physics	4	ST 361 *Intro. Stat. for Engrs.	3
T 211 Intro. to Fiber Sci. or		T 203 Intro. to Polym. Chem. or	
T 203 Intro. to Polymer Chem.	3	T 211 Intro. to Fiber Sci.	3
T 250 Text. Fab. Form. Struc.	3	TMT (TES) 320 Mech. Sp. Yn. Mfg. Syst.	4
Humanities/Soc. Sci. (EB 201)**	3	TMT 341 Knitting Syst.	3
Physical Education Elective	1	Physical Education Elective	1
	17		18

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
ENG 321 Comm. Tech. Info.	3	T 301 Techniques of Dye & Finish	4
TES 305 Dir. Fiber to Fab. Prod.	3	TMT (TES) 370 Technical Fabric Design	4
TMT (TES) 330 Text. Meas. & Qual. Cont.	4	TMT 380 Mgmt. & Cont. of Text. Syst.	3
TMT (TES) 351 Weaving Systems	3	TMT (TES) Concentration***	3
TMT (TES) 425 Text. Yarn Prod. & Prop.	3	Free Elective	3
Humanities/Soc. Sci. Elective**	3		17
	19		

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
TES 460 Phy. Prop. of Text. Fib.	3	Humanities/Soc. Sci. Electives**	6
TMT (TES) 495 Senior Seminar	1	TMT (TES) Concentration***	6
TMT (TES) Concentration***	6	Free Elective	3
Humanities/Soc. Sci. Elective**	3		15
Free Elective	3		
	16	Minimum Hours for Graduation	134

Note: Credit gained for MA 111 will be considered as excess credit and not applicable toward satisfying the 131 minimum hours required for graduation.

*ST 361 (T) recommended for Textile students

**Humanities/Social Science Electives

18 hours minimum are required in addition to English 111 and 112. Selection will follow university guidelines and come from university approved course lists.

At least 6 hours in humanities are required.

At least 6 hours in social sciences are required. *EB 201* is specified as one of these courses.

A two-course graded sequence in the same discipline is required in either humanities or in social sciences.

A graded sequence is defined as: a) A two-course sequence in which the first course is prerequisite to the second; or b)

A two-course sequence in which the second course is at the 300 level or higher.

The remaining hours will come from either humanities or social sciences or both.

***Textile Concentrations (Restrictive Electives)—15 hours

Selection of courses in this concentration will come from the following group. Nine credit hours will be selected from one group—either yarn mfg., fabric mfg., or qual. cont., and 6 additional hours from any of the remaining groups.

<i>Yarn Mfg.</i>	<i>Fabric Mfg.</i>	<i>Qual. Control</i>	<i>Text. Chem.</i>
TMT (TES) 420 .. 3	TES 405	IE 352	CH 220
TMT 480	TES 450	T 500	TC 305
TMT 490	TMT 443	TC 412	TC 306
TMT (TES) 520 .. 3	TMT 480	TMT 431	TC 406
	TMT 490	TMT 490	TC 415
		TMT (TES) 530	

B.S. DEGREE IN TEXTILES, TEXTILE DESIGN CONCENTRATION

This is an inter-school program sponsored by the School of Textiles and the School of Design for students interested in textile design.

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry I	4	ENG 112 Composition & Reading	3
ENG 111 Composition & Rhetoric	3	MA 201 Analytic Geometry & Calc. II or	
MA 102 Analytic Geometry & Calc. I or		MA 212 Analytic Geometry & Calc. B	4-3
MA 112 Analytic Geometry & Calc. A	4	TMT (PD) 170 Textile Design Orientation	1
T 105 Intro. Textile Material Sci.	3	T 220 Yarn Production Systems	3
PE 100 Health & Physical Fitness	1	Humanities/Soc. Science Elective*	3
	15	Physical Education Elective	1
			14-15

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CSC 200 Intro. to Computing	3	TMT (PD) 272 Printed Textile Design	3
DF 101 Environmental Design I** or		PY 208 General Physics or	
DF 111 Design Fundamentals	6-3	PY 212 General Physics	4
PY 205 General Physics or		T 203 Intro. to Polymer Chemistry	3
PY 211 General Physics	4	T 211 Intro. to Fiber Science	3
T 250 Fabrics: Form. & Struct.	3	ST 361 (T) Intro. to Statistics	3
Humanities/Soc. Sci. (EB 201)*	3	Physical Education Elective	1
Physical Education Elective	1		17
	17-20**		

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
PD (TMT) 371 Woven Textile Design	3	ENG 321 Communicating Technical Info.	3
TMT 341 Knitting Systems	3	PD (TMT) 372 Knitted Textile Design	3
TMT (TES) 330 Text. Meas. & Qual. Ctrl.	4	T 301 Techn. of Dye. & Finish.	4
TMT (TES) 351 Weaving Systems	3	TES 305 Direct Fiber to Fabr. Prod.	3
TMT 380 Mgmt. & Cont. of Textile Syst.	3	TMT (TES) 320 Mech. Spun Yarn Mfg. Systems ..	4
Humanities/Soc. Sci. Elective*	3		17
	19		

SUMMER INTERNSHIP

T 493 Industrial Internship in Textiles**** 3

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
PD (TMT) 470 Textile Design Studio	6	TES 460 Physical Properties Textile Fibers	3
TMT 425 Textile Yarn Production	3	TMT (TES) 370 Technical Fabric Design	4
TMT (TES) 495 Senior Seminar	1	Humanities/Soc. Sci. Electives*	6
Humanities/Soc. Sci. Elective*	3	Free Electives	6
Free Elective	3	New York Trip*****	
	16		19

Minimum Hours for Graduation 134

*In addition to ENG 111 and 112, a minimum of 18 hours of humanities/social sciences electives are required.

Selection will follow university guidelines and come from university approved lists. At least 6 hours each are required in the humanities and the social sciences (EB 201 is specified as one of the social sciences). A two-course graded sequence in the same discipline is required in either humanities or in social sciences. A graded sequence is defined as: a) A two-course sequence in which the first course is prerequisite to the second; or b) A two-course sequence in which the second course is at the 300 level or higher.

**DF 101 Environmental Design I (6 credits) is open only to textile students who have a GPA of 2.5 or better and an acceptable portfolio, and who have been accepted into the course by the recommendation of the School of Design interview panel.

***TDC students may elect to take DN 165 Computer Graphics (3 credits) in lieu of CSC 200.

****Students are encouraged to apply for an industrial internship between their junior and senior years. T 493 is an optional course and will come from free electives.

*****During spring break of the senior year a 6 day program of professional visits is arranged in New York City. This is a very important part of the program of study, and all students are strongly encouraged to plan ahead for this event.

B.S. DEGREE IN TEXTILE MANAGEMENT

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH 101 General Chemistry I	4	ENG 112 Composition & Reading	3
ENG 111 Composition & Rhetoric	3	MA 212 Analytic Geometry & Calc. B or	
MA 102 Analytic Geometry & Calc. I or		MA 201 Analytic Geometry & Calc. II	3-4
MA 112 Analytic Geometry & Calc. A	4	T 203 Intro. to Polymer Chem.	3
PE 100 Health & Physical Fitness	1	T 220 Yarn Prod. Systems	3
T 105 Intro. to Text. Material Sci.	3	Humanities/Soc. Sci. Elective (EB 201)**	3
	15	Physical Education Elective	1
			16-17

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CSC 101 Intro. to Programming or		ACC 265 Managerial Accounting	3
CSC 111 Intro. to FORTRAN or		PY 212 (or 208) General Physics	4
CSC 200 Intro. to Computer	2-3	ST 361 Intro. Statistics for Engr.*	3
EB 301 Intermediate Microeconomics**	3	T 211 Intro. to Fiber Science	3
PY 211 (or 205) General Physics	4	TMT 380 Mgmt. Ctrl. Text. Syst.	3
T 250 Fabric: Form. & Struct.	3	Physical Education Elective	1
Humanities/Soc. Sci. Elective**	3		17
Physical Education Elective	1		
	16-17		

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
EB 302 Intermediate Macroeconomics	3	EB 420 Corporation Finance	3
EB 313 Marketing Methods or		TMT 480 Textile Production & Cost Ctrl.	3
TMT 382 Principles Soft Goods Mkt.	3	Management Elective****	3
ENG 321 Communication Tech. Info.	3	TMT (TES) Elective***	3
PSY 307 Industrial & Organizational Psy.**	3	TMT (TES) Elective***	3
T 301 Technology of Dye. & Finish.	4	Free Elective	3
TMT 331 Qual. Ctrl. Textile Prod. Mgmt.	3		18
	19		

SENIOR YEAR

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
TMT 482 Textile Marketing Mgmt.	3	TMT 484 Mgmt. Dec. Mak. Text. Firm.	3
Humanities/Soc. Sci. Elective**	3	Humanities/Soc. Sci. Elective*	3
Management Elective****	3	Management Elective****	3
TMT (TES) Elective***	3	TMT (TES) Elective***	3
Free Elective	3	Free Elective	3
	15		15

Minimum Hours for Graduation 131

Note: 1. Credit gained for MA 111 will be considered as excess credit and not applicable toward satisfying the 131 minimum hours required for graduation.

2. A minimum grade of C is required in EB 201, TX 380 and ACC 265.

*ST 361 (T) Recommended for Textile Students (see Schedule of Classes)

**Humanities/Social Science Electives

University guidelines will be followed in that a minimum of 18 hours are required in addition to English 111 and 112. Selection will be from university approved lists with at least 6 hours from humanities and at least 6 hours from social sciences.

In this curriculum EB 201, EB 301, and PSY 307 are required electives. These courses satisfy university requirements of a minimum of 6 hours social sciences, and also the departmental requirement of a two-course graded sequence in the same discipline. A graded sequence is defined as: a) A two-course sequence in which the first course is prerequisite to the second or b) A two-course sequence in which the second course is at the 300 level or higher. At least 6 of the remaining 9 hours must be selected from the humanities area. The final 3 hours can be selected from either humanities or social sciences.

***Textiles Electives—12-13 hours:

Students have the option of selecting any four courses of the following courses:	
TES 305	3
TES 460	3
TMT (TES) 320	4
TMT 341	3
TMT (TES) 351	3
TMT (TES) 370	3
TMT 383	3
TMT (TES) 420	3
TMT (TES) 425	3

*****Management Electives*—9-12 hours

The management component of this curriculum is expanded to include a sequence of courses from one of the following groupings:

Production Factors

IE 307	3
IE 311	3
IE 352	3
IE 420	3
IE 421	3
PSY 340	3
TMT (TES) 420	3

Law and Labor Relations

EB 307	3
EB 308	3
EB 326	3
EB 332	3
EB 431	3
IE 355	3
PSY 340	3
TMT 381	3
TMT 487	3

Apparel

TMT 215	3
TMT 315	3
TMT 316	3

Dyeing and Finishing¹

CH 220	4
T 401	3
TC 210	3
TC 320	4
TC 330	3
TC 405	3
TC 406	2

Textile Design²

DF 111	3
PD (TMT) 272	3
PD (TMT) 371	3
PD (TMT) 372	3

Textile Operations

TES 405	3
TES 450	3
TMT (TES) 420	3
TMT (TES) 425	3
TMT 443	3
TES 460	3
TES 461	3
TMT (TES) 451	3

¹Dyeing and Finishing—Some courses require prerequisites which may not have been taken as part of the degree program.

²Textile Design—Students selecting this sequence must take all four courses.

Management Science Maths

MA 202	4
MA 301	3
MA 405	3
MA 421 <i>or</i>	
ST 421	3
MA 425 <i>or</i>	
MA 511	3
MA 426 <i>or</i>	
MA 512	3
ST 422	3

Finance Accounting

ACC 260	3
ACC 261	3
ACC 262	3
ACC 360	3
ACC 361	3
ACC 362	3
EB 350	3
EB 404	3
EB 422	3
EB 448	3
EB 451	3
IE 311	3
IE 307	3
IE 420	3

B.S. DEGREE IN TEXTILE MANAGEMENT, APPAREL MANUFACTURING AND MANAGEMENT CONCENTRATION

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Credit</i>	<i>Spring Semester</i>	<i>Credit</i>
CH 101 General Chemistry I	4	EB 201 Economics I**	3
ENG 111 Composition & Rhetoric	3	ENG 112 Composition & Reading	3
MA 112 Analytic Geometry & Calc. A <i>or</i>		MA 212 Analytic Geometry & Calc. B <i>or</i>	
MA 102 Analytic Geometry & Calc. I	4	MA 201 Analytic Geometry & Calc. II	3-4
PE 100 Health & Physical Fitness	1	T 203 Intro. to Polymer Chemistry	3
T 105 Intro. to Text. Material Sci.	3	T 220 Yarn Production Systems	3
	15	Physical Education Elective	1
			16-17

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Credit</i>	<i>Spring Semester</i>	<i>Credit</i>
CSC 101 Intro. to Programming <i>or</i>		ACC 265 Managerial Accounting	3
CSC 111 Intro. to FORTRAN Programming <i>or</i>		PY 212 (or 208) General Physics	4
CSC 200 Intro. to Computers	2-3	ST 361 Intro. to Statistical Engr.*	3
EB 301 Intermediate Microeconomics**	3	T 211 Intro. to Fiber Science	3
PY 211 (or 205) General Physics	4	TMT 215 Intro. to Apparel Technology	3
T 250 Text. Fabric Form. & Structure	3	Physical Education Elective	1
Humanities/Soc. Sci. Elective**	3		17
Physical Education Elective	1		
	16-17		

JUNIOR YEAR

<i>Fall Semester</i>	<i>Credit</i>	<i>Spring Semester</i>	<i>Credit</i>
EB 302 Intermed. Macroecon.**	3	EB 420 Corporate Finance	3
PSY 307 Industrial & Organizational Psy.**	3	ENG 321 Communicating Tech. Info.	3
T 301 Tech. of Dyeing & Finishing	4	TMT 316 Apparel Production II	3
TMT 315 Apparel Production I	3	TMT 331 Qual. Ctrl. Text. Prod. Mgmt.	3
TMT 380 Mgmt. Cont. Text. Sys.	3	TMT 480 Text. Prod. Cost Ctrl.	3
TMT 382 Prin. Soft Goods Marketing <i>or</i>		Free Elective	3
EB 313 Marketing Methods	3		18
	19		

SENIOR YEAR

<i>Fall Semester</i>	<i>Credit</i>	<i>Spring Semester</i>	<i>Credit</i>
IE 352 Work Analysis & Design	3	TMT 484 Mgmt. Dec. Making Text. Firm	3
TMT 431 Fabric Performance Testing***	3	Humanities/Soc. Sci. Elective**	3
TMT 482 Textile Marketing Mgmt.	3	Textile Electives***	6
Humanities/Soc. Sci. Elective**	3	Free Elective	3
Textile Elective***	3		15
Free Elective	3		
	18	Minimum Hours Required for Graduation	134

Note: 1. Credit gained for MA 111 will be considered as excess credit and not applicable toward satisfying the 134 minimum hours required for graduation.

2. A minimum grade of C is required in EB 201, TMT 380 and ACC 265.

*ST 361 (T) Recommended for Textile Students (see Schedule of Classes)

***Humanities/Social Science Electives

University guidelines require a minimum of 18 hours in addition to English 111 and 112. Selection will be from university approved lists with at least 6 hours each from humanities and social science courses. In this curriculum *EB 201, EB 301, and PSY 307* are required electives and satisfy both the university requirement for the social sciences and the departmental requirement of a two-course graded sequence in the same discipline. A graded sequence is defined as: a) A two-course sequence in which the first course is a prerequisite to the second or b) A two-course sequence in which the second course is at the 300 level or higher. At least 6 of the remaining 9 hours must be selected from the humanities area. The final 3 hours can be selected from either area.

***Textile Electives—12-13 hours

Students have the option of selecting any four of the following courses:

TES 305	3	TMT (TES) 351	3	TMT (TES) 420	3
TMT (TES) 320	4	TMT (TES) 370	4	TMT (TES) 425	3
TMT 341	3	TMT 383	3	TES 460	3

TMT 431 3 (Required for Apparel Manufacturing and Management Concentration)

SCHOOL OF VETERINARY MEDICINE

T. M. Curtin, *Dean*

W. M. Adams, *Associate Dean and Director of Veterinary Services*

D. R. Howard, *Associate Dean and Director of Academic Affairs*

C. E. Stevens, *Associate Dean and Director of Graduate Studies & Research*

C. A. McPherson, *Director of Laboratory Animal Resources*

T. J. Fischer, *Librarian*

No specific undergraduate degree track is associated with a pre-professional veterinary medicine program. However, faculty members from the School of Veterinary Medicine and the School of Agriculture and Life Sciences serve as advisors to undergraduate students enrolled and pursuing a baccalaureate program usually in a science related field. Pre-professional course requirements are listed below. After completion of the required courses, students may be eligible to apply for the professional veterinary program. Course requirements may be changed annually and are determined by the Committee on Admissions in the School of Veterinary Medicine. For further information about admissions requirements and the professional program contact the School of Veterinary Medicine Office of Admissions (4700 Hillsborough St., 919-829-4200 or 4205).

Undergraduate applicants with interests in veterinary medicine enrolled in the undergraduate programs at North Carolina State University at Raleigh *are expected to be pursuing a baccalaureate degree* (to include the social science and humanities requirements in the appropriate curriculum). Minimum requirements and course stipulations for curriculum planning should be followed through each of the departments or schools offering the appropriate degree. It is the responsibility of the students and their pre-professional advisors to be knowledgeable of those requirements.

All courses listed below except nutrition and biochemistry must be completed by the first day of class.

PRE-PROFESSIONAL COURSE REQUIREMENTS

	Credits
<i>Languages (6 Credits)</i>	
ENG 111 Composition & Rhetoric	3
ENG 112 Composition & Reading	3
<i>Physical Sciences (43 Credits)</i>	
MA 112 Analytical Geometry & Calculus A	4
or, you may substitute MA 113 for MA 112	
MA 113 Introduction to Calculus	4
PY 211, 212 General Physics or	8
PY 221 College Physics	5
ST 311 Introduction to Statistics	3
CH 101 General Chemistry	4
CH 107 Principles of Chemistry	4
CH 221, 223 Organic Chemistry I, II	8
BCH 451 Elementary Biochemistry	3
<i>Biological Sciences (14-15 Credits)</i>	
ANS 204 Livestock Feeds and Feeding	4
or, you may substitute one of the following	
ANS (NTR, PO) 415 Comparative Nutrition or	
NTR 301 Modern Nutrition	3
BS 100 General Biology	4
GN 411 The Principles of Genetics	3
MB 401 General Microbiology	4

Humanities Electives	6
Social Science Electives	6

PROFESSIONAL DEGREE PROGRAM & CAREER OPPORTUNITIES

Veterinary medicine is a science career dealing with the recognition, treatment, control and prevention of diseases in animals. Career options are unlimited and variable as animal health impacts upon the health and economic welfare of the nation. DVM candidates may select several career options upon graduation. Federal government, private industry, private practice, and research and teaching activities in a university setting are all possible for graduates and licensed doctors of veterinary medicine. Successful completion of the professional training program should prepare students for appropriate state licensing examination in the state of North Carolina and others. Persons interested in the professional courses offered may receive a brochure by contacting the School of Veterinary Medicine.

ANATOMY, PHYSIOLOGICAL SCIENCES AND RADIOLOGY

Professor A. L. Aronson, Head of the Department

Professors: R. Argenzio, P. Bentley, T. M. Curtin, J. E. Smallwood, C. E. Stevens, C. S. Teng, D. Thrall; *Adjunct Professors:* L. M. Jones, J. E. Schwetz, F. Walsh; *Associate Professors:* B. Gilroy, N. Olson, J. E. Riviere; *Adjunct Associate Professors:* T. E. Eling, S. Grosshandler, M. Negishi, C. T. Teng, E. W. Van Stee; *Assistant Professors:* S. A. Bai, L. M. Ballas, H. Berschneider, C. Brownie, L. N. Fleisher, J. E. Gadsby, C. K. Henrikson, L. Hudson, M. R. Metcalf, R. E. Meyer, L. Robinette, K. Spaulding, C. Swanson, S. Updike; *Adjunct Assistant Professor:* M. W. Dewhirst.

MICROBIOLOGY, PATHOLOGY, AND PARASITOLOGY

Professor L. Coggins, Head of the Department

Professors: H. A. Berkhoff, T. T. Brown, P. Carter, R. C. Dillman, D. J. Moncol, D. G. Simmons; *Professor Emeritus:* E. G. Batte; *Associate Professors:* W. T. Corbett, E. B. DeBuysscher, B. Hammerberg, M. G. Levy, D. J. Meuten; *Assistant Professors:* P. Cowen, J. M. Cullen, F. J. Fuller, C. B. Grinden, J. S. Guy, J. MacLachlin, P. E. Orndoff, S. Tonkonogy, R. Walker; *Adjunct Associate Professors:* J. Hardisty, E. E. McConnell, C. A. Montgomery, R. Peiffer, T. B. Ryan.

FOOD ANIMAL AND EQUINE MEDICINE

Professor W. D. Oxender, Head of the Department

Professors: W. Adams, J. Barnes, R. F. Behlow (*Extension*), B. D. Harrington, J. R. Harris (*Extension*), M. C. Roberts; *Associate Professors:* J. Fetrow, H. Hilley, M. Whitacre; *Assistant Professors:* K. Anderson, K. F. Bowman, B. Breuhaus, D. Bristol, G. P. Dial, S. Fleming, E. Henry, E. Hunt, D. Ley, L. Tate, C. Uhlinger, S. Van Camp, D. Wages, W. Duckett; *Adjunct Associate Professors:* L. Munger, S. Schmittle.

COMPANION ANIMAL AND SPECIAL SPECIES MEDICINE

Professor S. W. Crane, Head of the Department

Professors: C. Betts, E. B. Breitschwerdt, D. R. Howard, J. N. Kornegay, C. W. McPherson; *Associate Professors:* D. DeYoung, R. Ford, E. A. Stone, M. S. Young; *Assistant Professors:* J. Armstrong, S. Bunch, K. Flammer, E. Hardie, C. Jones, G. McCormick, T. Manning, M. Nasise, E. Noga, R. Page, D. Richardson, S. Roberts, V. Scheidt.



OTHER ACADEMIC AND ADMINISTRATIVE UNITS

Music Department

Price Music Center

J. P. Watson, *Director of Music*

Assistant Directors: M. C. Bliss, F. M. Hammond, J. C. Kramer, R. B. Petters, P. H. Vogel, E. B. Ward: *Musician-in-Residence:* filled by a new appointment each year

The Music Department at North Carolina State University serves a unique function on a predominantly scientific and technological campus. The department helps students advance their musical competencies and assists them in developing their musical insights. Course offerings in orchestras, bands, and choral groups coupled with introductory and survey courses serve the entire student body, permitting them to develop their abilities as producers as well as consumers of music.

Membership in any performing organization is through audition, thereby establishing minimum standards for participation. From symphony orchestra to brass quintet and from glee club to a voice class, ample opportunities exist for those who wish to maintain and improve their musical abilities.

Military Education and Training

The Department of Military Science (Army ROTC) and the Department of Aerospace Studies (Air Force ROTC) are separate academic and administrative subdivisions of the institution. Naval Science (Naval ROTC) is available through a cross-enrollment agreement with the University of North Carolina at Chapel Hill. Students in the ROTC programs will receive free elective credit for Aerospace Studies (AS), Military Science (MS), or Naval Science (NS) courses up to the limit of free electives in their curriculum.

DEPARTMENT OF MILITARY SCIENCE (ARMY ROTC)

Professor: Lieutenant Colonel H. K. Fisher, Jr.

Instructors: Major H. Dubose, Captain J. M. Borland, Captain H. Rogers, Captain W. G. Bickel, Captain W. Gregory, Captain S. Sharp.

Mission. The mission of the Army ROTC Program is to train college men and women to become commissioned officers in sufficient numbers to meet Active Army, Reserve, and National Guard requirements.

Program of Instruction. The Army ROTC program consists of a voluntary six-semester-hour Basic Course (freshmen and sophomore level) and a two-year Advanced Course (junior and senior level) which includes a six week camp in the summer prior to the senior year.

One may enter the Advanced Course without participating in the Basic Course by any of the following methods:

SIMULTANEOUS MEMBERSHIP PROGRAM (SMP): Persons or National Guard may take advantage of this program and, if accepted, enroll directly into the Advanced Course. SMP participants will be assigned to a unit near the school or home for part-time monthly officer training and will receive the ROTC Advanced Course subsistence payment of \$100 per month, plus approximately \$120 per month for the one weekend of Reserve or

Guard training. In addition, two weeks of Annual Training will be required for which the individual will receive full pay.

PRIOR SERVICE: Service veterans are eligible for placement into the Advanced Course.

BASIC SUMMER CAMP: Successful completion of the six week basic summer camp, held at Ft. Knox, Kentucky, is an alternative to the basic course.

TRANSFER CREDIT: Students entering as transfer students from other institutions may receive credit for work completed at other Senior ROTC units.

JUNIOR ROTC: Students who have participated in a Junior ROTC in high school may receive placement credit as determined by the Professor of Military Science.

Eligibility: All full time freshmen and sophomores may enroll in any Military Science Basic Course offering without obligation to the Army. To be eligible for participation in the Advanced Course, applicants must be in good academic standing, physically qualified and demonstrate satisfactory performance in the Basic Course. Additionally, applicants must be able to be commissioned by their 30th birthday; however, an age waiver may be obtained as long as the individual will be commissioned prior to his or her 34th birthday. A student must have a minimum of two years remaining as a full time student at either the undergraduate or graduate level.

Delays for Graduate Study: Qualified ROTC graduates may delay their entry into active service in order to obtain advanced academic degrees. Fellowships for advanced academic study are available to selected ROTC graduates, allowing up to two years of graduate study while receiving full pay and allowances plus payment for tuition, all fees, textbooks and required supplies.

Financial Aid: Army scholarships of two to four years, which pay for tuition, all fees and textbooks, are available on a competitive basis to students who are strongly motivated and academically qualified. Students in the Advanced Course receive a subsistence allowance of \$100 per month (tax free) up to a maximum of \$2000. All Advanced Course cadets are paid approximately one-half the basic pay of a second lieutenant, while attending the six-week Advanced Camp, plus travel allowances to and from camp.

Service Opportunities: Scholarship recipients may serve four years active duty upon commissioning or eight years in the U.S. Army Reserve or National Guard. Non-scholarship commissioners must serve three years on active duty or eight years with the Army Reserve or National Guard. Service consists of one weekend drill per month and two weeks annual training.

Program Features: Army ROTC classes are unique, offering instruction and a practical, working knowledge of leadership. Students are challenged early in their ROTC training to enable them to develop sound judgement, the desire to achieve, acceptance of responsibility, personal confidence, and to learn the principles of personnel management. The primary vehicle for this training during the academic year is Leadership Laboratory, where cadet officers and non-commissioned officers conduct instruction under the supervision of the Military Science Department's faculty. The intensive summer Advanced Camp is extremely effective in developing one emotionally, mentally and physically. All Army ROTC training is focused on preparing the student to meet the challenges of tomorrow's society, whether in a military or civilian careers.

Distinguished Military Students: The university names outstanding Army ROTC students as Distinguished Military Graduates.

Uniforms: Uniforms for Army ROTC are provided by the federal government.

DEPARTMENT OF AEROSPACE STUDIES (AIR FORCE ROTC)

Professor: Colonel Cleveland Simpson

Instructors: Major H. E. Haygood, Major J. A. Cuneo, Captain S. H. R. Lee, Captain D. L. Sims.

Mission. The mission of the Air Force Reserve Officers Training Corps (AFROTC) is to recruit and, through a college campus education program, commission second lieutenants for active duty in the Air Force.

Course of Instruction. The four-year program of instruction for Air Force ROTC consists of a two-year General Military Course (GMC) during your freshman and sophomore years; a summer field training course, and a two-year Professional Officer Course

(POC) during your junior and senior years. Non-scholarship students incur *no obligation* from participation in AFROTC during their freshman and sophomore years.

The GMC provides students the opportunity to become more informed about the purpose, history, and organization of the Air Force.

Selected four-year program applicants attend a four-week Field Training course during the summer between their sophomore and junior years. This summer camp is held at an Air Force base. Upon completion of the camp and prior to the start of the junior year, the individual chooses either to discontinue ROTC (with no obligation) or to enter the POC. The POC prepares you to enter active duty upon the completion of your college education. As a junior, the student is introduced to basic management theory and then given the opportunity to practice the application of this theory through the Leadership Laboratory. The senior year is devoted to an examination of American defense policy and continued application of management theory through the Leadership Laboratory.

A two-year program of instruction, consisting of a six week field training camp and the POC, is available to qualified students with at least two academic years remaining after selection.

All AFROTC cadets who are qualified and have been selected for active duty pilot training receive ground school training and up to thirteen hours of flight instruction. This training is normally conducted after the summer Field Training.

Upon graduation and satisfactory completion of the POC, the cadet is commissioned as a second lieutenant in the USAF.

Students desiring to enter the AFROTC program should contact the Department of Aerospace Studies (AS), Room 145, Reynolds Coliseum.

Selection. A student enrolled in the AFROTC may pursue a four-year program or a two-year program. Both offer the opportunity for receiving an AFROTC scholarship.

To meet enrollment requirements for the POC, students must achieve a qualifying score on the Air Force Officer Qualification Test (AFOQT) and the SAT/ACT; meet necessary physical requirements, and must have good academic records. Qualified veterans desiring a commission through an AFROTC program must complete the two-year advanced program and attend four weeks of field training. Non-veterans must complete the two-year GMC, the two-year POC and attend four weeks of field training. Non-veterans may elect to successfully complete six weeks field training and the two-year POC in lieu of the above four-year program. Cadets must complete either program before their 30th birthday to qualify for a commission. Deserving prior service personnel may obtain waiver of maximum nonflying commission age requirements up to age 35.

Successful completion of one semester of English composition in freshman or sophomore years and one semester of mathematical reasoning is mandatory.

Transfer Credit. Credit is allowed for work at other institutions having AFROTC units established in accordance with the provisions of the National Defense Act and regulations governing the AFROTC.

Financial Aid. Students in Air Force GMC, other than scholarship students, receive no monetary allowance. During summer training of either four or six weeks duration, students receive pay and travel allowances. All AFROTC students in their last two years receive a subsistence allowance of \$100 (tax free) per academic month.

Scholarships. Air Force ROTC students enrolled in the program may qualify for two, two and one half, three, three and one half, and four-year scholarships. The majority of these scholarships pay tuition, fees, a textbook allowance and \$100 (tax free) per month during the academic year. Scholarships are awarded by the Air Force based primarily upon academic achievement. A student must be enrolled in AFROTC to be eligible.

Organization. The AFROTC unit is organized as a cadet wing (commanded by a cadet colonel) with an appropriate number of squadrons that, in turn, are composed of flights and squads. The wing, squadron and flight commanders and their staff are cadet officers. They are selected from cadets enrolled in the POC. All other positions are held by GMC cadets. Cadet officers plan and conduct the cadet wing operation with AFROTC faculty supervision. Cadet social activities necessitate some personal expenses by cadets.

Distinguished Military Students. The university names outstanding Air Force ROTC students as Distinguished Air Force ROTC graduates.

Uniforms. Uniforms for Air Force ROTC are provided by the federal government.

NAVAL SCIENCE (NAVAL ROTC) CROSS-ENROLLMENT WITH UNC-CH

Professor: Captain H. A. Bunch, Jr.

Associate Professor: Commander J. W. Bailey; *Instructors:* Major R. Adelhelm; Lieutenant E.S. Henkler; Lieutenant K. L. Baetzel; Lieutenant P. L. Boneysteel.

Mission. The purpose of the Naval ROTC Program is to provide a source of highly qualified and motivated naval officers, both men and women, to serve on surface ships, in aircraft, in submarines, or in the Marine Corps. Midshipmen who satisfy academic and physical requirements are commissioned as either an Ensign in the Navy or Second Lieutenant in the Marine Corps. As N.C. State currently has no NROTC Department, Midshipmen are cross-enrolled in the Naval Science Department at UNC Chapel Hill. N.C. State Midshipmen take all ROTC courses on campus at N.C. State and attend laboratory/drill sessions at the Navy/Marine Corps Reserve Center.

4-Year NROTC Program. There are basically two NROTC Programs leading to a commission as a Navy or Marine Officer upon graduation, the Scholarship Program and the College Program.

Scholarship Program. The Scholarship Program leads to a regular commission in the Navy or Marine Corps. For students who receive a Navy/Marine Corps scholarship, the Navy will pay tuition and fees, buy books, supply uniforms, and pay \$100 per month tax-free subsistence allowance to help defray the cost of normal board at the university. During the summers between school years scholarship students will receive 4-6 weeks of at-sea training conducted on ships and aircraft of the Navy's first line force. Upon graduation and commissioning, the scholarship students are obligated to serve a minimum of four years on active duty.

College Program. For those students who are interested in a reserve commission and do not desire a scholarship, or for those who are seeking an opportunity to qualify for a scholarship after entering NCSU, the College Program is available. Selection for the College Program is made from students already enrolled at NCSU, with applications being accepted and considered by the staff of the NROTC unit. Students enrolled in the College Program are provided uniforms, Naval Science textbooks, and during the final two years of the program, receive a \$100 per month subsistence allowance. College Program midshipmen receive a single summer training cruise between their junior and senior year. Except for the administrative differences, no distinction is made between the Scholarship and College Program midshipmen. The active duty commitment following graduation for a College Program student is three years.

Students in the College Program are eligible to compete for scholarships at regular intervals throughout the college year. Most College Program students who have demonstrated above average academic and professional performance in the unit have received scholarships.

Two-Year Programs. The Two-Year Programs offer an opportunity to participate in NROTC during the final two years of university study. Both Scholarship and College Programs exist, offering the same advantages to the student as the respective four-year programs. Upon selection, the candidate attends a six-week training course at Newport, Rhode Island, during the summer between the sophomore and junior years so that he may receive instruction in the Naval Science subjects normally covered in the first two years at the unit. Participants in this training course receive uniforms, rooms, board and officer candidate pay during the period and, upon satisfactory completion of training, enter the NROTC program as third year students.

The Marine Option. A limited number of quotas are available for students who wish to enter either of the NROTC Programs as Marine Officer candidates. For others who may decide upon a Marine Corps commission after joining NROTC, selection for the Marine Option may be made in the sophomore year. A midshipman's status as a Marine Option will result in some modifications as to curriculum and the final summer training period.

Curriculum. Due to the increasingly advanced technologies being employed by the Navy, candidates for regular Navy Commissions are being encouraged to select academic majors in mathematics, engineering, and scientific disciplines. However, each student in the NROTC program is free to choose his area of major study.

The NROTC training program emphasizes military indoctrination, physical fitness, and academics. All required NROTC courses are fully accredited and taken for free elective credit. Additional university courses may be required depending upon one's major; however, all Navy option scholarship midshipmen must complete one year of calculus and physics and one semester of a foreign language. In addition to the courses taken for university credit, midshipmen will attend one laboratory/drill period each week.

Midshipmen Life. Academic excellence is emphasized throughout the NROTC Program with commensurate participation in the full range of campus, extra curricular activities. Additionally, midshipmen have opportunities to examine all aspects of life in the Navy and Marine Corps through field trips, summer cruises, social activities, and participation in the midshipmen military organizations.

Further information regarding application for and admission into the N.C. State Naval ROTC may be obtained on campus in Room 104 Reynolds Coliseum or by writing to the Professor of Naval Science, Box 7310, NCSU, Raleigh, N.C., 27695.

Graduate School

Peele Hall

D. W. Stewart, *Interim Dean*

R. E. Fornes, *Associate Dean*

A. M. Witherspoon, *Associate Dean*

The Graduate School provides instruction and facilities for advanced study and research in the fields of agriculture and life sciences, design, education, engineering, forest resources, humanities and social sciences, physical and mathematical sciences, textiles and veterinary medicine.

The school is currently composed of more than 1,400 graduate faculty members within the nine academic schools. Educated at major universities throughout the world and established both in advanced teaching and research, these scholars guide the university's graduate student body of some 3,350 men and women from all areas of the United States and about 88 other countries.

The faculty and students have available exceptional facilities including libraries, laboratories, modern equipment and special research areas.

For a list of graduate degrees offered at North Carolina State University and details on programs and admissions, consult the *Graduate Catalog*.

University Extension

Jane S. McKimmon Center

W. L. Turner, *Vice Chancellor for Extension and Public Service*

G. J. Andrews, *Associate Vice Chancellor*

M. F. Hester, *Assistant to the Vice Chancellor for Extension and Public Service*

R. K. White, *Director, Adult Credit Program Development*

Campus-wide coordination and communications for extension, public service and continuing education activities are provided by the Vice Chancellor for Extension and Public Service. In carrying out this responsibility the Vice Chancellor provides assistance and encouragement in the identification of educational needs for individuals and groups throughout the state, program development and implementation; program evaluation, and

statewide coordination with the constituent members of the University of North Carolina. The Vice Chancellor is assisted in his campus-wide responsibilities by the Extension and Continuing Education Committee of the University which is composed of faculty representatives from each of the schools.

The office of the Vice Chancellor provides for the linkage for inter-school centers and institutes, other multidiscipline resources of the university and continuing education programs to provide for the lifelong educational, public service, and technical assistance needs of the citizens of North Carolina.

DIVISION FOR LIFELONG EDUCATION

Office of Continuing Education and Professional Development

K. R. Crump, *Director*

D. S. Jackson, *Associate Director*

R. M. Jones, *Assistant Director*

Continuing Education Specialists: F. E. Emory, D. Shell, C. McElroy, A. S. Warren, B. Winston

Office of Adult Credit Programs

J. F. Cudd, Jr., *Assistant Director for Adult Credit Programs*

Continuing Education Specialist: N. E. Polk

The Division for Lifelong Education at N.C. State is the statewide adult education service linking the university, its scholars, research, and resources with the people and communities of the state.

The division's programs are designed to meet the needs of any adult who can benefit from university-level study. The instructional staff consists of university faculty from N.C. State and other institutions and authorities in specific fields.

Only those programs appropriate to the standards of scholarship and instruction of N.C. State are offered. Both credit and noncredit programs are offered on the university campus and in communities throughout the state by independent study and telecommunications.

Independent Study—The division offers more than 40 different courses in 22 subject areas. These courses are administered through the Independent Study by Extension Office of the UNC Division of Extension and Continuing Education, 121 Abernethy Hall, Chapel Hill, N.C. 27514. Television-based courses are also occasionally offered in conjunction with the UNC-TV Network.

Credit and Noncredit Evening Classes—The Office of Adult Credit Programs offers late afternoon and evening courses primarily for the benefit of adults who are unable, because of time limitations, to enroll in regular day courses. The credit courses are sponsored and taught by the university's academic departments. Each semester, approximately 300 courses are offered in over 45 subject areas. Twelve undergraduate and ten graduate degrees may be completed by individuals enrolled solely in evening courses. Over 150 noncredit classes are held annually which attract over 1,500 participants.

Off-Campus Credit Courses and Programs—Classes are offered throughout the state on a need basis or by request from organizations and special groups. In addition, the Master of Engineering degree and Master of Textiles are offered by video-based instruction, either live (via ITFS) or videotaped. In 1985-86 the division administered credit courses at 73 in-state, 49 out-of-state, and 5 out-of-country locations with registration totaling 1,124.

Short Courses, Institutes, and Conferences—The Office of Continuing Education and Professional Development facilitates the university's efforts to meet its Land-Grant tradition of providing education to all the people. The scope of the programs include: agriculture, communications, data processing, economics, education, engineering, forestry, management, the physical sciences, recreation, textiles, and veterinary medicine. During 1985-86 there were 922 courses offered with registrations totaling over 18,400.

The university awards Continuing Education Units to participants in qualified programs. Continuing Education Units are part of a nationwide recording system to provide a

uniform measure of attainment in noncredit educational programs. One CEU at N.C. State is defined as "ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction and qualified instruction."

SUMMER SESSIONS

J. F. Cudd, Jr., *Director*

N. E. Polk, *Assistant Director*

The summer sessions at North Carolina State University offer an extensive educational program planned to meet the varied needs and interests of approximately 13,000 students. Sixty departments offer instruction in more than 700 courses, approximately 90% of which are at the undergraduate level.

Each of the university's nine schools, with a combined faculty of more than 500, participates in the summer sessions. The schedule includes two "regular" five-week sessions, a ten-week session, and a three-week institute for adult and extension educators, as well as several dozen evening courses scheduled for the convenience of working adults.

Summer courses and special programs are designed for the new student, the undergraduate wanting to advance his or her academic standing at State, the graduate desiring to continue study and research during the summer months and for visiting students pursuing degrees at other institutions. Teachers who need to earn credit toward renewal of teaching certificates or advanced degrees in education and persons in professional fields who wish to keep abreast of new developments and trends also take advantage of State's summer programs.

For information regarding summer activities write: Director of Summer Sessions, Box 7401, Raleigh, North Carolina 27695-7401.

CENTER FOR URBAN AFFAIRS AND COMMUNITY SERVICES

G. J. Andrews, *Director*

P. Meyer, *Associate Director*

S. Cameron, *Assistant Director*

F. E. Emory, Sr., *Assistant Director*

Operations Group Managers: Y. S. Brannon, L. Mandell, S. R. Mills

The Center for Urban Affairs and Community Services brings the research, educational, and extension resources of NCSU to bear upon community problems associated with urbanization in North Carolina. In addition to providing direct services, such as applied research, education and training, and technical assistance, to local and state governments, the center also: (1) provides experiential educational opportunities for graduate and undergraduate students and (2) develops and supports research opportunities for faculty and upper-level graduate students.

Work at the center is organized into three operations groups. *The Applied Research Group* provides research assistance in the broad areas of social sciences, human services, policy analysis, and evaluations research. *The Systems Development Group* assists government and non-profit agencies with practical means for collecting, sorting, organizing, retrieving, and displaying information. *The Administrative Services Group* supports the center as a whole with secretarial assistance and with fiscal management.

The Center for Urban Affairs and Community Services coordinates its work with other members of the University of North Carolina's Urban Studies programs through the Urban Studies Council. The council enables universities and other institutions across the state to pool their efforts to encourage productivity and responsiveness of government and community institutions.

INTERNATIONAL TRADE CENTER

R. Brown, *Director*

The International Trade Center offers programs to upgrade and improve the skills of executives, managers and professionals whose work involve international trade. Practical, in-depth seminars, workshops and short courses provide instruction in areas of identified need, such as marketing, export, finance, documentation and a variety of other aspects of world trade. The center offers briefings and updates on key markets abroad. The Special International Luncheon series brings international leaders to the area, providing timely and authoritative information in important international business and trade topics. The International Trade Center arranges specially designed in-house programs for individual companies and business groups. While acting as resource persons and instructors, leaders in business, finance, law, government, and academia utilize their international experience to offer instruction, guidance and down-to-earth advice. International Trade Center programs attract a diverse group of people, including those from business and industry; professional firms; banks; service organizations; federal, state, and local government; and educational institutions.

JANE S. McKIMMON CENTER FOR EXTENSION AND CONTINUING EDUCATION

D. S. Jackson, *Director*

M. F. Hester, *Associate Director*

The Jane S. McKimmon Center serves as the premier educational facility in North Carolina. It provides program support services in pleasant surroundings conducive to the interchange of ideas and information. In the ten years since opening in June, 1976, the Center's sixteen conference rooms have been used for 9,176 educational meetings—bringing a total of 589,495 adults from all walks of life to our campus for participation in an education activity.

University Libraries

I. T. Littleton, *Director*

D. S. Keener, *Assistant Director for General Services*

N. L. Waltner, *Assistant Director of Technical Services*

W. C. Lowe, *Assistant Director for Reference Services*

The D.H. Hill Library and its branches contain more than 1.2 million volumes of books and bound journals, 600,000 federal government publications, and more than 2.5 million microforms. The collections are particularly strong in the biological and physical sciences, engineering, agriculture, forestry, textiles and architecture, with the arts, humanities and social sciences also well represented. The libraries regularly receive more than 8,000 magazines and journals. Five special libraries—the **Burlington Textiles Library** in Nelson Hall, the **Harry B. Lyons Design Library** in Brooks Hall, the **School of Forest Resources Library** in Biltmore Hall, the **Veterinary Medical Library** in Veterinary Medical Building and the **Curriculum Materials Center** in Poe Hall—serve the special needs of their respective schools.

The D.H. Hill Library has been a depository for U.S. government publications since 1924 and receives over 97 percent of these publications. The library also receives the microfiche research reports published by the Department of Energy, the National Aeronautical and Space Administration (NASA), the Educational Resources Information Center (ERIC), and the National Technical Information Services (NTIS).

On-line computer-based literature searches are offered by the library for a number of data bases such as ERIC, DIOSIS, AGRICOLA (Bibliography of Agriculture), and Psychological Abstracts. Only direct costs are charged to the user.

Facilities and equipment are also available for both individual and group use of audiovisual media. The library's theatre can be scheduled for group media presentations, and films in the State Library's film collection can be borrowed by the D.H. Hill Library's Media Center for academic use by faculty and students.

All areas of the library complex are air-conditioned and open to students and faculty. The Media Center is equipped with audio and video equipment for group and individual viewing and listening. The library has a growing collection of video and audio cassettes for individual and class use.

CURRICULUM MATERIALS CENTER

M. A. Link, *Coordinator*

The Curriculum Materials Center, administered by the School of Education, is located in Poe Hall. The center maintains a collection of education materials with particular emphasis on teaching methods, research, administration and psychology and includes films, filmstrips, slides, audiotapes, video cassettes and simulation games. Audiovisual equipment is available for previewing materials in the center. The center acquires textbooks adopted by the State Board of Education for secondary level subjects as well as other selected textbooks and reference materials. The mission of the center is to support programs in the School of Education. Lending policies permit the use of certain materials by the larger campus community for instructional and research purposes.

University Computing

H. E. Schaffer, *Assistant Provost for Academic Computing Services*

H. L. Buckmaster, *Director, Administrative Computing Services*

C. W. Malstrom, *Director, Computing Center*

S. Khorram, *Director, Computer Graphics Center*

The computer facilities at NCSU are comprised of two major components interconnected by a comprehensive data communications network. The local component, a large collection of both centralized and distributed computing resources, serves the academic and administrative functions of our campus. The remote component is a large scale computing facility, owned by NCSU in conjunction with the University of North Carolina and Duke University, that primarily serves the academic areas of instruction and research. This facility, the Triangle Universities Computing Center (TUCC) is located in the Research Triangle Park about 15 miles from the NCSU campus.

TUCC is equipped with an IBM 3081 Model K computer system with an attached Floating Point System Model 164 Scientific Array Processor; a DEC VAX 11/750 dedicated to communications service; and a variety of peripheral and telecommunications equipment. Data communication links to super-computers are also provided, and TUCC is a member of the Pittsburgh Super-computer Consortium. TUCC also serves as a communications hub, providing current access to the BITNET, Telenet and other networks. An ARPAnet connection will be completed early in the 1986 fall semester, and a SURAnet (the southeastern portion of the NSFnet) node will be installed during the winter. A large variety of software and data bases are located at TUCC.

On campus the Computing Center has an IBM 3083 for administrative data processing, and an IBM 4341 (being upgraded to a 4381), which includes data communications to TUCC via T1 links, for academic use. The Computing Center also provides a large selection of central services, including terminal facilities, consulting, microcomputer support, data communications, and repair facilities for microcomputers and terminals. The center is also

responsible for a large number of minicomputers and microcomputers located in the academic departments. Access to the centralized facilities is provided by the data communications network provided on the campus and also by dial up lines.

A number of special purpose computing facilities also exist. The Computer Graphics Center (CGC) is a university-wide research facility. It provides a versatile centralized facility to use and develop graphics and image processing techniques. The hardware in the CGC includes a DEC VAX 11/780 and other computers, and associated peripherals; interactive graphics; and data input/output devices. The software includes image processing and graphics packages acquired either commercially or from other institutions, or developed at NCSU. Remote sensing and geobased information systems are emphasized.

Other facilities in the Schools of Education, Engineering, Humanities and Social Sciences, Design, Veterinary Medicine, Forestry, Physical and Mathematical Sciences, and Agriculture and Life Sciences provide specialized educational and research computing. The Computer Science Department has a facility designed for undergraduate instruction in computing, which includes 170 student workstations with an array of microcomputers. The Leazar Hall facility also has a Data General MV8000 system.

These extensive computing facilities provide students with the resources necessary to enhance their education and meet a wide variety of research requirements. Consequently, the university makes this range of computing facilities available for all disciplines and specialties.

Research Triangle

The unique "Research Triangle" in North Carolina has captured national and international attention. It is a complex of three major research universities and a research park. Because of this wealth of educational and research opportunities, the Triangle area contains the highest total of Ph.D. scientists and engineers on a per capita basis in the nation. The Triangle Universities—NCSU, the University of North Carolina at Chapel Hill, and Duke University—have a subsidiary campus in the park—the Research Triangle Institute—that has an annual research revenue of approximately \$60 million.

The park, which announced its first tenant in 1965, now has over 57 public and industrial research organizations situated on 6,650 acres of land. Over 25,000 people work in the research Triangle Park. Organizations in the park include the permanent headquarters of the National Institute of Environmental Health Services, the Environmental Protection Agency, and the National Center for the Humanities, as well as facilities of private companies like IBM, Glaxo and Burroughs Wellcome. Two major new research complexes for microelectronics and biotechnology recently built in the park. Faculty and graduate students from the universities work closely with many of the companies and agencies in the park and scientists from the park frequently hold adjunct appointments in one or another of the Triangle Universities.

Research Centers and Facilities

BIOLOGY FIELD LABORATORY

P. D. Doerr, *Director*

The Biology Field Laboratory is located six miles from the university campus and comprises two small streams, a 20 acre pond, 120 acres of varied terrestrial habitats and several laboratory buildings. The facilities, used for laboratory and field instruction and for undergraduate, graduate and faculty research, is particularly suited for use by advanced

classes in several biological science departments. Qualities that make the Field Laboratory an attractive teaching and research site include habitat diversity, restricted public access and proximity to the campus.

CENTER FOR COMMUNICATIONS AND SIGNAL PROCESSING

Sirus Chitsaz, *Director*

North Carolina State University was selected as a site for an Industry/University Cooperative Research Center for Communications and Signal Processing. The National Science Foundation awarded the university a five year grant totaling \$650,000 to be used in conjunction with company membership fees to begin operation of the center. As of June, 1984, the center had the following industrial members: Carolina Power and Light Company, Digital Equipment Corp., Exxon, General Telephone and Electronics, Rockwell International, International Business Machines, International Telephone and Telegraph, Western Union, Westinghouse Electric Corp., General Electric, and Northern Telecom. The two objectives of the center are to conduct basic and applied research that can lead to products and services in the communications and signal processing fields and to strengthen industry/university relationships. In addition to providing useful research services to industrial participants, the center will enhance the education of graduate students by providing them with practical, relevant research topics and the means for carrying out their research.

CENTER FOR ELECTRIC POWER RESEARCH

John J. Grainger, *Director*

The Center for Electric Power Research is a university/industry cooperative research center recently established within the NCSU School of Engineering. The center is funded by the university and sponsoring organizations from the various sectors of the electric utility and power industry. The purpose of the center is to engage in collaborative efforts aimed at enhancing the excellence of research and graduate-level degree programs in electric power systems engineering. This primary purpose is accomplished by providing support for interested faculty and students to be involved in basic and applied research directly relevant to the needs of the multifaceted electric power industry. Motivation to work with the center derives from the close university/industry interaction, the leverage afforded to an industrial sponsor's membership dues and the enhanced professional and research opportunities provided to faculty and students in electric power engineering.

While the current research program involves faculty from the Department of Electrical & Computer Engineering and the Department of Nuclear Engineering, the center will facilitate access to all the various resources of the university for all sectors of the electric power industry.

CENTER FOR OCCUPATIONAL EDUCATION

J. R. Clary, *Acting Director*

Established as a vocational education research and development center in 1965 under the provisions of the Vocational Education Act of 1963, the Center for Occupational Education, an integral unit within the School of Education, was founded on the principle that the problems facing occupational education are so varied that no single field of research or single disciplinary orientation has the capability of providing all the answers. Studies and conferences in occupational education planning, work analysis, evaluation, labor and economics, policy analysis, personnel and leadership development, and education in rural areas have been included in the center's program. The center's programs are financed largely by grants and contracts from federal and state agencies.

CENTER FOR SOUND AND VIBRATION

R. F. Keltie, *Director*

The Center for Sound and Vibration, established in 1969 and administered within the Department of Mechanical and Aerospace Engineering, comprises faculty pursuing the solution to the wide variety of vibration and sound problems occurring in machinery and aircraft design. Graduate programs exist at M.S. and Ph.D. levels in such fields as noise and vibration control, aeroacoustics, hearing conservation, computer-aided machinery design, architectural and musical acoustics, and acoustic signal processing. Outstanding experimental facilities, which include large anechoic and reverberant rooms and computer graphics equipment, are available. The center's programs are financed largely by grants and contracts from industry and federal and state agencies.

ELECTRON MICROSCOPE FACILITIES

There are four electron microscope facilities at N.C. State available to graduate students and faculty for research purposes. The School of Agriculture and Life Sciences (SALS) Center for Electron Microscopy is located in Gardner Hall, the Engineering Research Microscope Facility is in Burlington Engineering Labs and the Department of Wood and Paper Science Electron Microscopy Lab is in Biltmore Hall. The new SVM Electron Microscopy Laboratory is located in the North Carolina State University School of Veterinary Medicine at 4700 Hillsborough Street in Raleigh

J. M. Mackenzie, Jr., *Coordinator, SALS Center for Electron Microscopy*

The SALS Center for Electron Microscopy has a Philips 400T transmission electron microscope with STEM capabilities in addition to three other transmission microscopes—a JEOL 100-S, Hitachi HU11-B, and a Hitachi HS-8. There are two scanning electron microscopes—a Philips 505T and a JEOL T-200. The center, renovated in 1981, is fully equipped for most biological specimen preparation and has two darkrooms.

Formal instruction is provided through the biological sciences curriculum in the preparation of specimens, the use of electron microscopes, and the production of electron micrographs.

E. M. Gregory, *Supervisor, Engineering, Analytical Instrumentation Facility*

The Engineering Research Analytical Instrumentation Facility is equipped with an ion microprobe, a 200kv analytical scanning transmission electron microscope (STEM), and a computer-controlled scanning electron microscope (SEM), the latter two equipped with energy dispersive X-ray analysis systems. These are suitable for examination of metallurgical, ceramic and electronic materials, textiles and organic specimens. The high voltage STEM enables the researcher to examine thicker specimens. The X-ray analytical capability is used in conjunction with high resolution imaging for qualitative and quantitative elemental analysis of small amounts of materials (down to cubic microns in bulk materials and a few hundred nanometers in thin samples). The computer control facility is available for quantitative image analysis (stereometry) as well. The ion microprobe can perform elemental and isotope analysis to monolayer depths, with a lateral resolution of one micrometer. It can also do depth profiling, especially important for implanted semiconductors. The facility is completely equipped for specimen preparation in the physical sciences, is representative of the best modern microanalysis instrumentation, and is unique in this geographical area.

E. A. Wheeler, *Coordinator, WPS Microscopy Lab*

The Department of Wood and Paper Science Microscopy Lab is equipped with a Siemens Elmiskop-1A transmission electron microscope as well as other equipment necessary for the preparation and study of specimens.

M. J. Dykstra, *Director, SVM Electron Microscopy Laboratory*

The **SVM Electron Microscopy Laboratory** is a facility housing a Philips 410 state-of-the-art transmission electron microscope for biological specimens and a JOEL JSM-35 scanning electron microscope. All the back-up equipment for preparing specimens to be viewed with either instrument are housed within the laboratory as well as complete darkroom facilities for the preparation of routine and publication materials.

HIGHLANDS BIOLOGICAL STATION

R. C. Bruce, *Director*

As an institutional member of the Highlands Biological Foundation, Inc., North Carolina State University helps support the Highlands Biological Station, an inland field station located 3,823 feet above sea level in the heart of North Carolina's southern Appalachians. The area has an extremely diverse biota and the highest rainfall in the eastern United States.

Facilities are available throughout the year for pre- and post-doctoral research in ecology, botany, zoology, soils and geology. Field-oriented research is supported by a laboratory building with research rooms and cubicles, a well equipped library, and five cottages and a dining hall located on the edge of a six-acre lake. The station owns 16 acres surrounding the lake as well as several tracts of undisturbed forested land. Research grants available through the station provide stipends for room, board, and research expenses.

INSTITUTE OF STATISTICS

D. L. Solomon, *Director*

The Institute of Statistics is composed of two sections, one at Raleigh and the other at Chapel Hill. At North Carolina State University, the institute provides statistical consulting services to all branches of the institution, sponsors research in statistical theory and methodology, and coordinates the teaching of statistics at the undergraduate and graduate levels. The instructional and other academic functions are performed by the Department of Statistics, which forms a part of the institute.

INTEGRATED MANUFACTURING SYSTEMS ENGINEERING INSTITUTE

C. F. Zorowski, *Director*

The Integrated Manufacturing Systems Engineering Institute has been established at North Carolina State University to provide a multifaceted educational, research, and technology transfer initiative in manufacturing systems engineering. The objectives of this program are to educate engineers in the theory and practice of advanced design and manufacturing methods; to conduct basic and applied research on topics related to contemporary manufacturing problems; and to engage in technology transfer to increase productivity and improve the quality of manufactured products.

The central goals of the institute is to integrate computer-aided processes into the design and control of manufacturing facilities enabling them to produce manufactured goods of improved quality at lowered cost. Through both internally and externally funded research projects the institute helps solve generic design and manufacturing engineering problems and provides a vehicle for technology transfer.

MATERIALS RESEARCH CENTER

R. F. Davis, *Director*

The Materials Research Center was established in 1984 at NCSU as an interdisciplinary program involving persons representing the Departments of Chemistry, Electrical and Computer Engineering, Materials Engineering and Physics. The principal thrust area of

the center involves fundamental studies in the epitaxy of compound semiconductors. The center serves as a focal point for this cooperative research. However, the experimental efforts are conducted within the four departments noted above.

MICROELECTRONICS CENTER OF NORTH CAROLINA

A. Reisman, *Vice-President for Semiconductor Research and Technology*

North Carolina State University is a participating member of the Microelectronics Center of North Carolina (MCNC) which has been established to support the academic and research programs in microelectronics. Other participating institutions are the University of North Carolina at Chapel Hill, Duke University, North Carolina Agricultural and Technical State University, the Research Triangle Institute and the University of North Carolina at Charlotte.

MCNC consists of a Semiconductor Research and Integrated Circuit Design and Fabrication Facility located at the Research Triangle Park near Raleigh and a teaching and research Integrated Circuit Fabrication Facility located on the NCSU campus. These facilities are dedicated to the support of VLSI (Very Large-Scale Integration) microelectronics teaching and research programs at the participating institutions. Faculty and students at NCSU have access to the use of MCNC facilities on sponsored research projects and for formal academic courses including microelectronics design and fabrication laboratories. Areas of interest include system design, systems engineering, integrated circuit technology, semiconductor materials and device physics. Departments at NCSU which are actively involved in the program include Electrical and Computer Engineering, Computer Science, Physics, Chemistry, and Materials Engineering.

NORTH CAROLINA JAPAN CENTER

J. Sylvester, Jr., *Director*

The North Carolina Japan Center was established in 1980 at North Carolina State University to strengthen academic, scientific, economic, and cultural ties between Japan and North Carolina. The center also helps conduct the formal exchange NCSU has with Nagoya University, a major national scientific university in Japan.

Under the North Carolina Japan Fellows program, 41 professors and staff have taken a year of Japanese language training and then worked in Japan for a half year with Japanese colleagues in their specialty. They use their Japanese experience in their teaching and research, and they participate in the activities of the center and of the state in its relations with Japan.

The center offers introductory and advanced levels of Japanese language for students and gives special seminars for businessmen and others interested in Japan. Public lectures are given on Japan by members of the staff and the Fellows. Various films dealing with modern Japan, and North Carolina's ties with Japan have been prepared for teacher training, public television, and Japanese companies interested in investment in North Carolina. The center is raising an endowment in memory of former Provost Harry Kelly and his contribution to US-Japan scientific ties.

NUCLEAR MEASUREMENTS AND ANALYSIS DIVISION

J. N. Weaver, *Manager*

Specialized nuclear service facilities are available to the university faculty, students, and industry. The purpose of these facilities is to further the use of nuclear energy in engineering research and in scientific and public service programs. The facilities include: a 1 megawatt steady-state and pulse, pool-type, research reactor (PULSTAR) with a variety of test facilities; neutron radiography unit; prompt gamma facility; intermediate hot laboratories with hoods, junior caves and glove boxes; a neutron activation analysis and radioisotope laboratory; low level radiation counting lab, NaI and solid-state radiation detectors; nuclear materials laboratory; microcomputer laboratory; counting and photographic

rooms. The 50,000 sq. ft. Burlington Engineering Laboratories complex houses the Department of Nuclear Engineering and the Department of Materials Engineering with their associated offices and laboratories. All of the facilities including the reactor are on the North Carolina State University campus.

PESTICIDE RESIDUE RESEARCH LABORATORY

T. J. Sheets, *Director*

The Pesticide Residue Research Laboratory is a facility in the School of Agriculture and Life Sciences devoted to research on pesticide residues in animals, plants, soils, water and other entities of man's environment. Although the laboratory is administered through the Department of Entomology, it provides pesticide residue analyses for research projects in all departments of the school.

Not only does the laboratory perform interdepartmental residue research, but faculty in the laboratory also conduct independent pesticide research on persistence and decomposition in soils and plants, absorption and translocation in plants, distribution in environment, and contamination of streams, estuaries and ground water.

PLANT DISEASE AND INSECT CLINIC

R. K. Jones, *Director*

The Plant Disease and Insect Clinic (PDIC) provides a unique diagnostic and educational service to plant growers in North Carolina. It is an integral part of the extension program in the Plant Pathology and Entomology Departments. The PDIC receives approximately 7,000 problem samples each year. County Agents, Extension Specialists and growers submit samples from agricultural crops, forests, urban gardens, house plants, etc. This provides an opportunity to observe and work with practical problems currently developing and causing damage.

There are constant and increasingly rapid changes taking place in agricultural technology. These changes require new types of assays and more sophisticated laboratory examinations. Plant problems must be correctly diagnosed and proper control strategies employed as quickly as possible for growers to obtain maximum yields. The PDIC provides a vital link between the numerous highly specialized resources and faculty members at NCSU and the practical plant problems in the field. New or unusual outbreaks of plant diseases and insects can be quickly detected through the PDIC.

PRECISION ENGINEERING CENTER

Thomas A. Dow, *Director*

The Precision Engineering Center, established in 1982, is a multidisciplinary research and graduate education program dedicated to providing new technology for high precision manufacturing. Current work involves the fabrication and assembly of optical systems used in such products as cameras, copy machines, laser bar-code scanners, and compact audio discs. Progress in precision is largely due to improvements in the ability to measure and control using high speed digital computers. The Precision Engineering Center attempts to integrate the measurement function into the manufacturing process. Skilled faculty, combined with government and industry support help the center develop new products that boost productivity and improve the manufacturing base of the country.

REPRODUCTIVE PHYSIOLOGY RESEARCH LABORATORY

C. A. Lassiter, *Director*

The Reproductive Physiology Research Laboratory, administered through the Department of Animal Science, conducts research on animals used in studies on reproduction. Facilities and equipment are available for surgery, in vitro growth of embryos, micromanipulation and transfer of embryos between females. Recent emphasis has been on teaching and has been on teaching and research in the area of mammalian biotechnology.

SEA GRANT COLLEGE PROGRAM

B. J. Copeland, *Director*

The University of North Carolina Sea Grant College Program is a state/federal partnership program involving all campuses of the UNC system. A majority of its activities, however, are conducted at N.C. State University. Sea Grant combines the university's expertise in research, extension and education to focus on practical solutions to coastal problems. Graduate and undergraduate research opportunities rest with individual project directors on campus and with a special fellowship program administered by the program office.

SOUTHEASTERN PLANT ENVIRONMENT LABORATORY—PHYTOTRON

R. J. Downs, *Director*

The Southeastern Plant Laboratory, commonly called a phytotron, is a laboratory especially designed for research dealing with the response of biological organisms to their environment. The high degree of control makes it possible to duplicate any climate from tropical rain forests to arid desert or arctic cold.

The North Carolina State unit concentrates on applied and basic research related to agricultural problems encountered in the southeastern United States. However, the ability to control all phases of the environment allows inclusion of research dealing with all aspects of plant science.

The facilities are available to the resident research staff, participants in North Carolina State's graduate research program and to domestic and foreign visiting scientists.

TRIANGLE UNIVERSITIES NUCLEAR LABORATORY

E. G. Bilpuch, *Director*

TUNL is a laboratory for research in nuclear physics. Located on the campus of Duke University in Durham, the laboratory is staffed and operated by faculty members and students from the physics departments of Duke University, the University of North Carolina at Chapel Hill, and North Carolina State University. A variety of pure and applied research is performed, at lower energies with two small accelerators, and up to 30 MeV with the combination of a Tandem Van dGraaff accelerator and a cyclotron (the world's first cyclograaff). Extensive supporting facilities are available: on-line computers, polarized and pulsed beams, and ultra-high beam energy resolution. There is extensive collaboration with the numerous domestic and foreign visiting scientists.

WATER RESOURCES RESEARCH INSTITUTE

D. H. Moreau, *Director*

The Water Resources Research Institute is a unit of the University of North Carolina System and is located on the campus of North Carolina State University.

The institute was established to promote a multi-disciplinary attack on water problems, to develop and support research in response to the needs of North Carolina, to encourage strengthened educational programs in water resources, to coordinate research and educational programs dealing with water resources, and to provide a link between the state and federal water resources agencies and related interests in the university.

Research and educational activities are conducted through established departments and schools of the university system. All senior colleges and universities of North Carolina are eligible to participate in the institute's research program.

University Development

John T. Kanipe, Jr., *Vice Chancellor for University Development*

Dennis A. Taylor, *Executive Assistant to the Vice Chancellor for University Development*

The Office of University Development is the principal private fund-raising division of the university. It embraces the work of 18 organizations; including, the Board of Trustees of the Endowment Fund, the NCSU Alumni Association, and the NCSU Student Aid Association.

Board of Trustees of the Endowment Fund of North Carolina State University

The Board of Trustees of the Endowment Fund was established under the Legislative Act creating the new University System October 30, 1971. The Board is charged with administering bequests, donations and gifts to the university.

N.C. Agricultural Education Foundation, Inc.

The North Carolina Agricultural Foundation, Inc., renders financial assistance in the development of strong teaching, research and extension programs in agriculture through the School of Agriculture and Life Sciences at North Carolina State University.

N.C. Dairy Foundation, Inc.

The North Carolina Dairy Foundation, Inc., promotes and improves all phases of dairying in North Carolina through education, research and extension. A 48-member board of directors handles the affairs of the foundation. These directors represent distributors, producers, and jobbers.

N.C. Engineering Foundation

The North Carolina Engineering Foundation, Inc., gives financial assistance to the programs in the Schools of Engineering and Physical and Mathematical Sciences.

N.C. Forestry Foundation, Inc.

The North Carolina Forestry Foundation, Inc., was incorporated April 15, 1929. The foundation has acquired a tract of land known as the Hofmann Forest (consisting of about 80,000 acres in Jones and Onslow counties), which is used as a demonstration and research laboratory for the School of Forest Resources at North Carolina State University.

N.C. Physical and Mathematical Sciences Foundation, Inc.

The School of Physical and Mathematical Sciences shared private support with the School of Engineering from the North Carolina Engineering Foundation for its first 25 years. On April 11, 1983, the Physical and Mathematical Sciences Foundation, Inc. was organized for the exclusive enhancement of the School of Physical and Mathematical Sciences' teaching, research, and public service programs.

N.C. Textile Foundation, Inc.

The North Carolina Textile Foundation, Inc., was formed to promote the development of the School of Textiles, and was incorporated December 31, 1942. Funds for this foundation have been raised largely from textile manufacturing plants, other corporations and industries closely allied with textiles.

N.C. Tobacco Foundation, Inc.

This foundation was organized in 1975 to meet funding problems which had seriously threatened the state's long-established and highly successful tobacco improvement program. The foundation provides the means for agricultural leaders to maintain support for N.C. State tobacco research and extension activities.

N.C. Veterinary Medical Foundation, Inc.

The North Carolina Veterinary Medical Foundation, Inc., was formed May 18, 1978. Foundation funds are used to support the educational, research, and community service activities of the new School of Veterinary Medicine at North Carolina State University.

N.C. 4-H Development Fund, Inc.

The North Carolina 4-H Development Fund, Inc., was organized in 1959. Four-H Development Fund monies are used to promote and advance all areas of 4-H Club work in North Carolina.

North Carolina State University Education Foundation

The North Carolina State University Education Foundation, Inc., was chartered on October 20, 1972. The foundation's principal purpose is to support through private funds the teaching, research, and extension programs of the School of Education at North Carolina State University.

North Carolina State University Foundation, Inc.

The North Carolina State University Foundation, Inc., was organized December 11, 1942, to foster and promote the general welfare of North Carolina State University and to receive and administer gifts and donations for such purposes.

North Carolina State University Humanities Foundation, Inc.

The North Carolina State University Humanities Foundation, Inc., was officially incorporated on May 15, 1974. The foundation's objectives are to aid and promote, by financial assistance and otherwise, all types of education and research in the School of Humanities and Social Sciences at North Carolina State University.

North Carolina State University Parents' Association

This support organization provides a forum for the expression of ideas and concerns from the parents to the administration of the university.

North Carolina State University School of Design Foundation, Inc.

The North Carolina State University School of Design Foundation, Inc., was organized in January 1949. Foundation funds are used for the promotion and advancement of the School of Design at North Carolina State University.

The Pulp and Paper Foundation, Inc.

The Pulp and Paper Foundation, Inc., was incorporated December 19, 1954, by the Southern pulp and paper mills to support the program of pulp and paper technology in the School of Forest Resources.

University Relations

Albert B. Lanier, Jr., *Director of University Relations*

The Office of University Relations plans and directs the University's public relations effort and institutional communications program by providing coordination of and support for the external marketing and communications activities of the various offices and schools. Its organizational structure incorporates the Office of Information Services and includes the Public Relations Committee.

OFFICE OF INFORMATION SERVICES

Lucy Coulbourn, *Director*

The Office of Information Services oversees the areas of media relations, public information and university publications. In its role as a news service it provides news and feature materials to media about the academic programs, research and extension activities and the activities of students and faculty. Information Services is charged with the responsibility for communicating to the public through the media of the state and the nation, the many dimensions of the university and its contribution to the general public welfare. Among its many publications are *Statelog*, sent to some 70,000 alumni and other university supporters, and *The Journal*, a publication for faculty and staff.

The office is located temporarily at 219 Oberlin Road.

PUBLIC RELATIONS COMMITTEE

An advisory committee of lay leaders, a number representing various media, the Public Relations Committee assists the university administration and the Development Board in assessing and conducting public relations.

The Alumni Association

Bryce R. Younts, *Director of Alumni Relations*

The Office of Alumni Relations maintains ties between North Carolina State University and its alumni and, in conjunction with the Alumni Association, promotes and reports the growth progress of N.C. State.

As an administrative component of the university, the Office of Alumni Relations maintains alumni records, organizes alumni activities which draw NCSU alumni closer to each other and to their alma mater, and informs alumni of educational opportunities and other services available to them from NCSU.

Serving as the staff for the NCSU Alumni Association—a non-profit organization—the Office of Alumni Relations helps conduct the annual Alumni Loyalty Fund campaign, administers the association's programs of university support and provides additional alumni services in the form of publications, tours and special events.

To the students of NCSU, the work of Alumni Relations and the Alumni Association means both merit and need-based scholarships, student loans, assistance for academically-related student activities, a student affiliate organization—State's Student Alumni Associates—and special services to freshmen and graduating seniors. The premier project of the association is the John T. Caldwell Alumni Scholars Program. The association has 104 of these outstanding scholars and leaders on campus for the Centennials Year, 1986-87.

For the faculty of NCSU, the private support efforts provide teaching professorships and teaching, extension and research awards.

Library support and a University Advancement Fund are also part of the NCSU support program made possible by the Alumni Association and administered through the Office of Alumni Relations.

The main vehicle of communication between North Carolina State University and its alumni is the *North Carolina State Alumni Magazine*, published by the Alumni Association. Six times a year, the magazine reports on important and exciting programs of education, extension, and research at N.C. State; features interesting alumni, students, faculty, and Wolfpack sports figures; and keeps alumni in touch with each other through class notes.

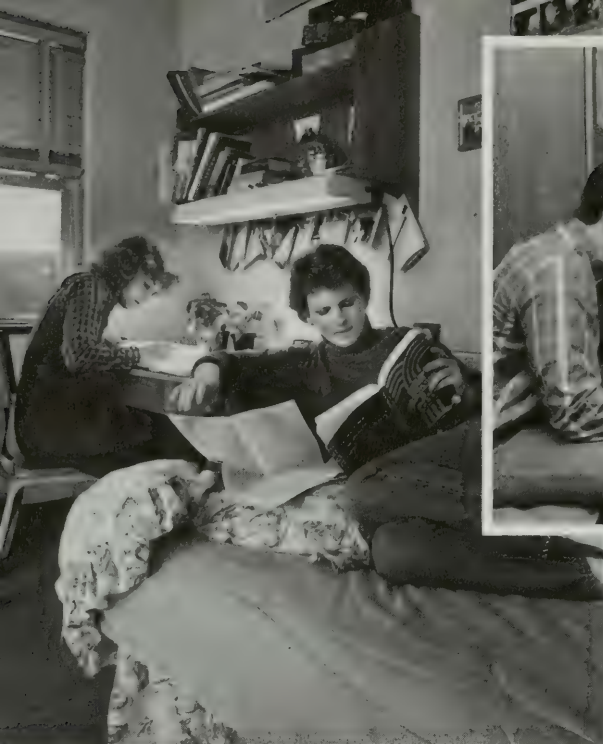
Active members in the NCSU Alumni Association is open to all former students regardless of the length of their stay at N.C. State. Associate membership is open to all friends of the university, including parents of students.

Students and parents are invited to visit the Office of Alumni Relations located in the Alumni Memorial Building on Pullen Road, or to inquire about programs of service by writing NCSU Office of Alumni Relations, Box 7503, North Carolina State University, Raleigh, NC 27695-7503.



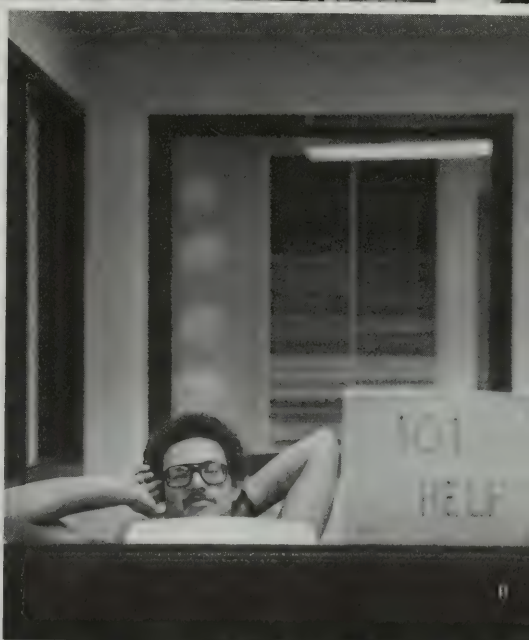
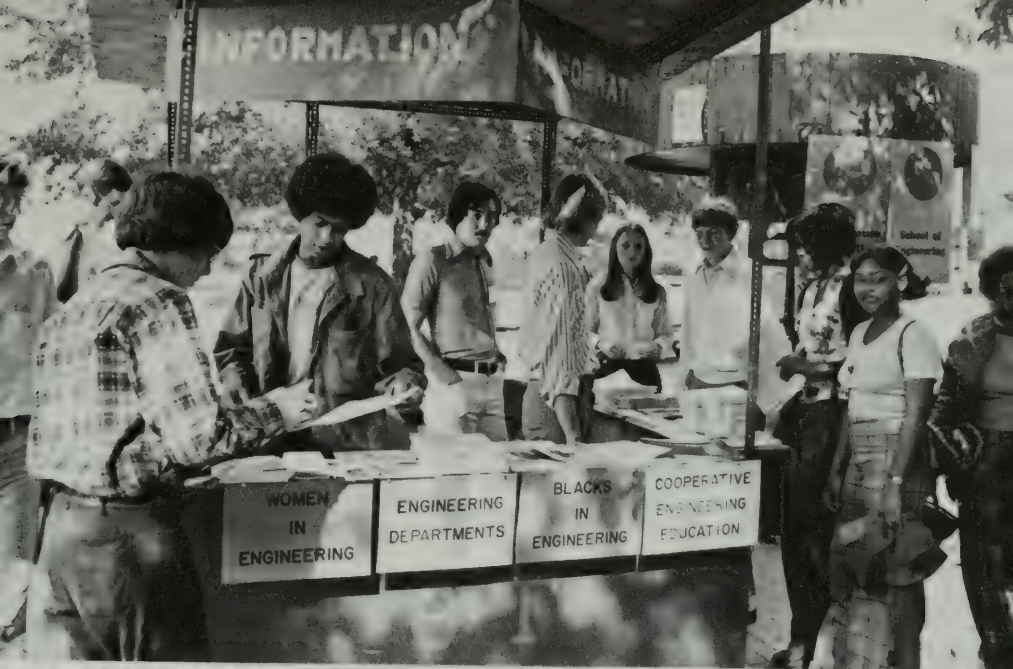
*North Carolina State University
through photos . . .*

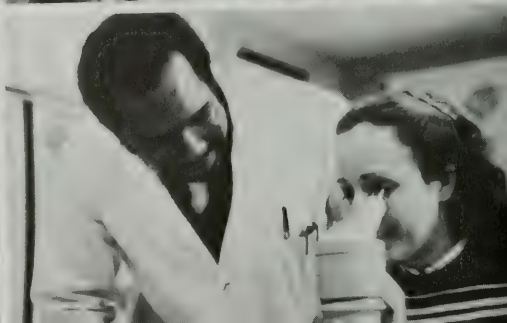
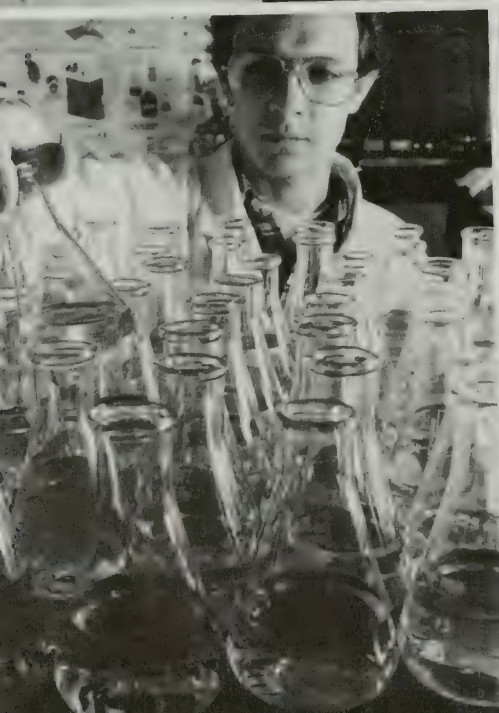
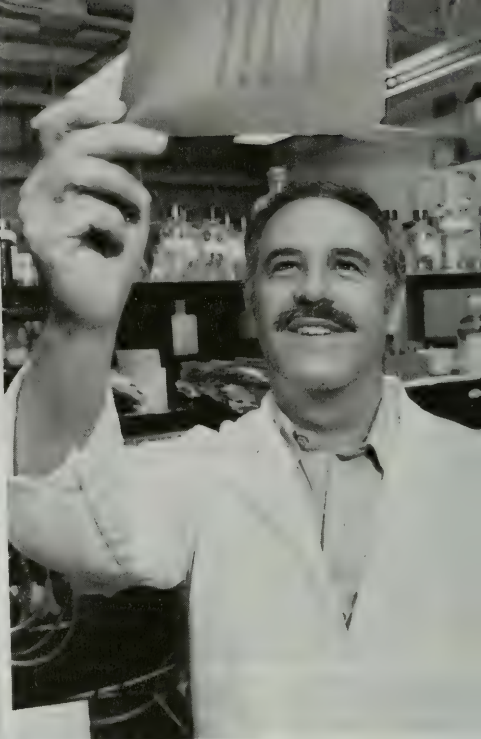


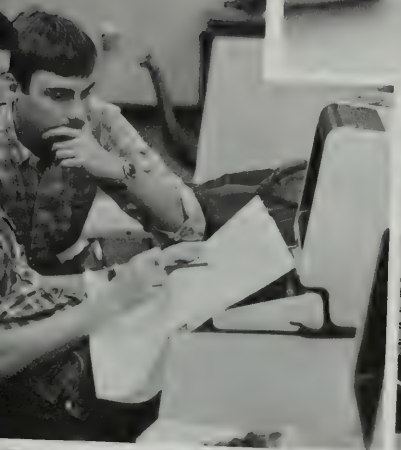


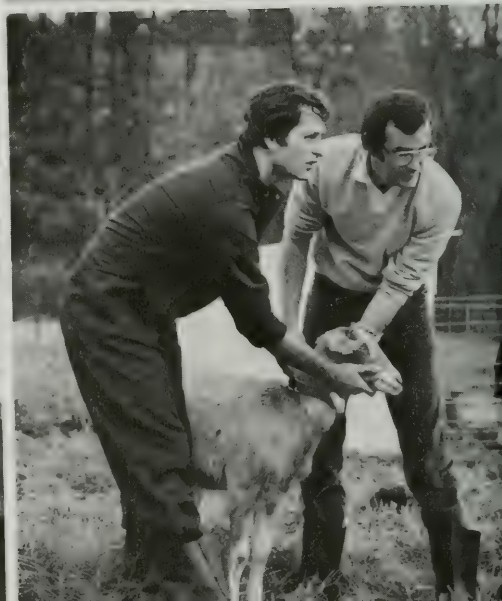
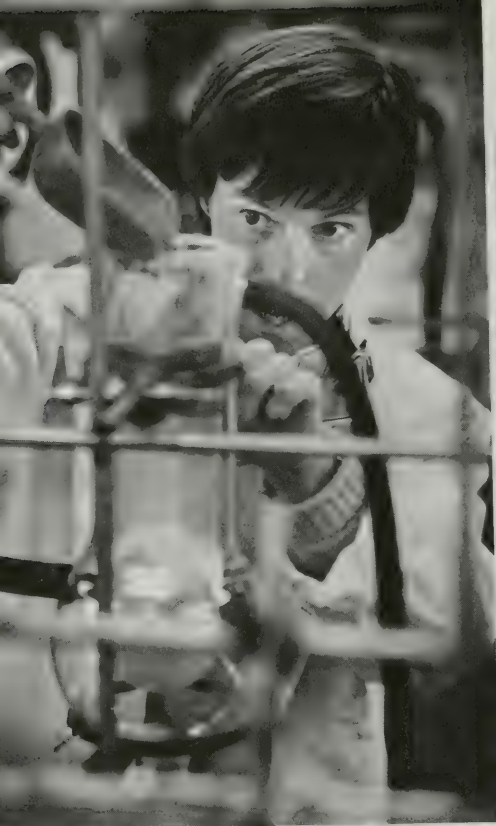


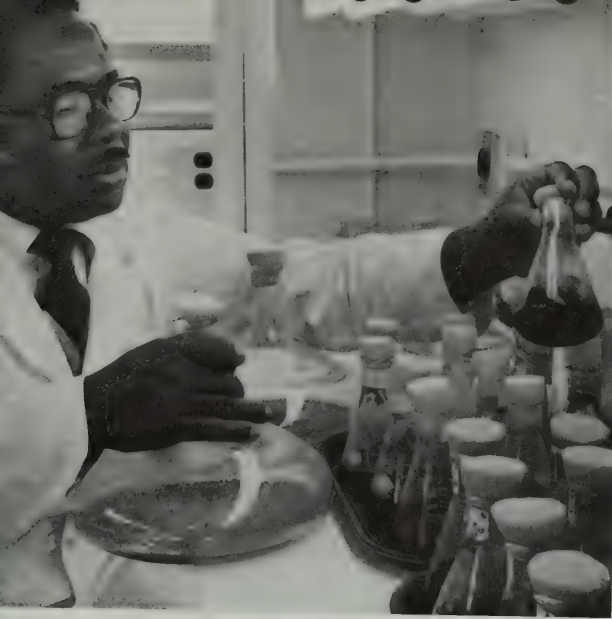


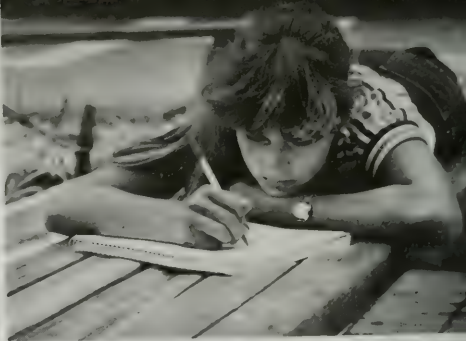
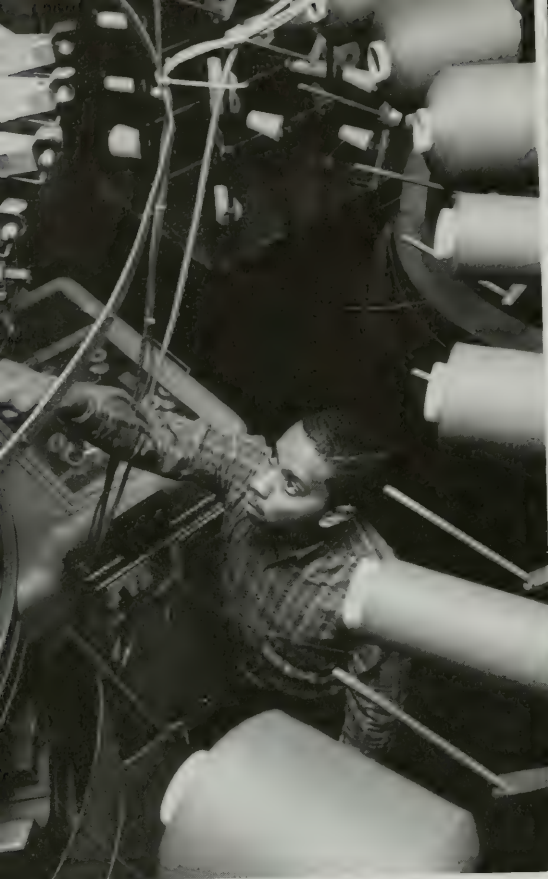












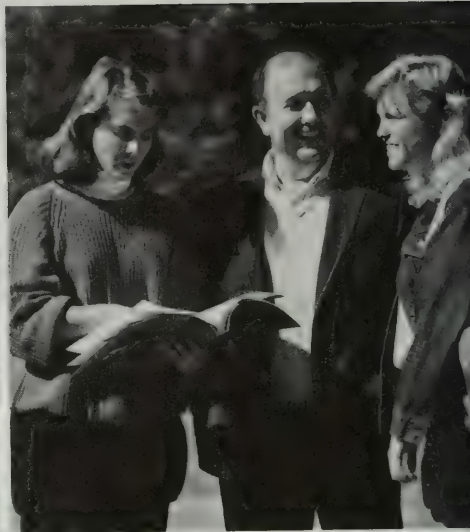
















COURSE DESCRIPTIONS

The course descriptions are arranged first in alphabetical order according to **course prefix** reflecting the department or discipline of the course. Some courses are cross-listed, indicating that they are offered in two or more departments or disciplines. Within each of the prefix groups, the course descriptions are arranged by **course number**: numbers 100-299 are courses intended primarily for freshmen and sophomores; numbers 300-499 are courses intended primarily for juniors and seniors; numbers 490-498 are seminar, project, or special topics courses; number 499 is for undergraduate research.

This section contains all undergraduate courses, 100-level through 400-level, approved for the 1987 Spring Semester. It also contains selected 500-level graduate courses which are available to advanced undergraduates who have the required prerequisites. It does not contain any 600-level courses which are available to graduate students only. For a complete listing of 500- and 600-level courses, see the Graduate Catalog.

A typical course description shows the prefix, number, and title followed by prerequisite, credit, and offering information. **Prerequisites** are courses or levels of achievement that a student is expected to have completed successfully prior to enrolling in a course. **Corequisites** are courses which should be taken concurrently by students who have not previously completed the corequisites. Prerequisites and corequisites for a given course may be waived by the instructor of the course or section. It is the student's responsibility to satisfy prerequisites, or obtain from the instructor written waiver of prerequisites, for any course in which he or she may enroll. Failure to satisfy prerequisites may result in removal from enrollment in the course. Consent of the department is required for all practicum and individual special topics or special problems courses as well as internships and thesis or dissertation research. Some courses also have **restrictive statements**, such as "Credit in both MA 102 and MA 112 is not allowed." Restrictive statements for a given course may be waived only by a school dean.

An example of **credit** information is: 4(3-2) F, S, Sum. The 4 indicates the number of semester hours credit awarded for satisfactory completion of the course. The (3-2) normally indicates that the course meets for three hours of lecture or seminar each week and for two hours of laboratory, problem, or studio work each week. Some courses are offered for variable credit, and a listing of 1-6 indicates that from one to six semester hours of credit may be earned as arranged by the department offering the course.

Offering information is shown as F, S, Sum, Alt. yrs. F indicates that the course is normally offered in the Fall Semester, S indicates the Spring Semester, Sum. indicates the Summer Terms, and Alt. yrs. indicates the course is normally offered in alternate years. The absence of offering information indicates that there is no fixed pattern, and students should check with the department concerning when a particular course will be offered.

Other abbreviations used in the course descriptions are: CI, consent of instructor required; grad., graduate; undergrad., undergraduate; sr., senior; jr., junior; soph., sophomore; fr., freshman; lab., laboratory; lect., lecture; and sem., seminar.

CONTENTS

AC	Agricultural Communications	CE	Civil Engineering
ACC	Accounting	CH	Chemistry
ALS	Agriculture and Life Sciences	CHE	Chemical Engineering
ANS	Animal Science	CS	Crop Science
ANT	Anthropology	CSC	Computer Science
ARC	Architecture	CSE	Computer Studies
AS	Aerospace Studies	DF	Design Fundamentals
BAE	Biological and Agricultural Engineering	DN	Design
BCH	Biochemistry	E	Engineering
BMA	Biomathematics	EB	Economics and Business
BO	Botany	ECE	Electrical and Computer Engineering
BS	Biological Sciences	ED	Education
		EH	Engineering Honors

ENG	English	MEA	Marine, Earth, and Atmospheric Sciences
ENT	Entomology	MS	Military Science
EO	Engineering Operations	MUS	Music
FL	Foreign Languages and Literatures	NE	Nuclear Engineering
FLE	English for Foreign Students	NS	Naval Science
FLF	French Language and Literature	NTR	Nutrition
FLG	German Language and Literature	OR	Operations Research
FLH	Hebrew Language and Literature	PA	Public Administration
FLI	Italian Language and Literature	PD	Product Design
FLJ	Japanese Language and Literature	PE	Physical Education
FLP	Portuguese Language and Literature	PHI	Philosophy
FLR	Russian Language and Literature	PHY	Physiology
FLS	Spanish Language and Literature	PM	Pest Management
FOR	Forestry	PO	Poultry Science
FS	Food Science	PP	Plant Pathology
FW	Fisheries and Wildlife Sciences	PS	Political Science
GC	Graphic Communications	PSY	Psychology
GN	Genetics	PY	Physics
GRK	Greek Language and Literature	REL	Religion
HA	History of Art	RRA	Recreation Resources Administration
HI	History	SOC	Sociology
HS	Horticultural Science	SP	Speech-Communication
HSS	Humanities and Social Sciences	SSC	Soil Science
IA	Industrial Arts	ST	Statistics
IE	Industrial Engineering	SW	Social Work
LAR	Landscape Architecture	T	Textiles
LAT	Latin Language and Literature	TC	Textile Chemistry
MA	Mathematics	TE	Textile Engineering
MAE	Mechanical and Aerospace Engineering	TES	Textile Engineering and Science
MAT	Materials Science and Engineering	TMT	Textile Management and Technology
MB	Microbiology	TOX	Toxicology
		UNI	University Studies
		VD	Visual Design
		VMA	Anatomy, Physiological Sciences & Radiology
		VMC	Companion Animal and Special Species Medicine
		VMF	Food Animal and Equine Medicine
		VMM	Microbiology, Pathology, and Parasitology
		VMS	Veterinary Medical Sciences
		WPS	Wood and Paper Science
		ZO	Zoology

AGRICULTURAL COMMUNICATIONS

AC 311 Communication Methods and Media. *Preq: ENG 112. 3(3-0)* F,S. Foundational frameworks of agricultural communications. The technologies of communication and the systematic approach to the development of communication materials. Development of applied skills in the areas of design, production, evaluation, and dissemination of information unique to the agriculturist. **BOSTICK**

AC 470 Agricultural Communications. *Preq: AC 311. Senior Standing. 3(3-0)* S. Theory, research and structure of informational techniques and delivery systems designed

for Agricultural Communications producers and consumers. A study of the traditional to current needs and ramifications. BOSTICK

Selected 500-level Courses Open to Advanced Undergraduates

AC 590 Special Topics in Agricultural Communications. *Preq: Sr. or grad. standing. 1-6.*

ACCOUNTING

(Also see EB-Economics and Business)

ACC 210 Accounting I—Concepts of Financial Reporting. *Credit may not be received for both ACC 210 and 280 or 260. 3(3-0) F,S,Sum.* Financial reporting concepts, the information generating process, income measurement, resource valuation, corporate equity measurement, reporting practices, and the interpretation and analysis of financial statements. Basic accounting principles and concepts, the accounting cycle, purchase and sale transactions, internal controls dealing with cash, receivables and payables, inventories, and plant and equipment considerations.

ACC 220 Accounting II—An Introduction to Managerial Accounting. *Preq: ACC 210. Credit may not be received for both ACC 220 and 280 or 261. 3(3-0) F,S,Sum.* Analysis of accounting data that are useful in managerial decision making and in the control and evaluation of the decisions made within business organizations. An introduction to basic models, financial statement analysis, cost behavior analysis and cost control procedures.

ACC 280 Managerial Accounting. *Credit may not be received for both ACC 280 and ACC 210, 220 or ACC 265. 3(3-0) F,S,Sum.* Principles underlying financial reporting. Analysis of cost and quantitative data for managerial decision making. The objective is to provide understanding of accounting measures and an appreciation of the uses of accounting information.

ACC 310 Intermediate Financial Accounting I. *Preq: ACC 220. Credit may not be received for both ACC 310 and 360. 3(3-0) F,S,Sum.* Asset valuation and analysis. The financial statement generation process along with the valuation and reporting problems relating to cash, accounts receivable, inventories and operating assets. Introduction to financial statement analysis, accounting theory, and professional standards.

BROOKS, COX, GRIFFIN

ACC 311 Intermediate Financial Accounting II. *Preq: ACC 310. Credit may not be received for both ACC 311 and 361. 3(3-0) F,S,Sum.* Enterprise equities: valuation and analysis. Valuation and reporting problems relating to owners' equities, long-term investments, and liabilities. Consolidations, partnership accounting, and related professional pronouncements.

COX, FRAZIER, ROCKNESS, THORNE

ACC 320 Managerial Uses of Cost Data. *Preq: ACC 220. Credit may not be received for both ACC 320 and 262. 3(3-0) F,S,Sum.* Managerial uses of cost data in planning, controlling, and evaluating organizational activities and in making business decisions. Budgeting, cost behavior, product costing and pricing, and an introduction to production cost.

FERRERI, McKEE, WILLIAMS

ACC 330 An Introduction To Income Taxation. *Preqs: ACC 210 and EB 201. Credit may not be received for both ACC 330 and 364. 3(3-0) F,S.* A conceptually oriented introduction to federal income taxation in its political, social and economic contexts. The primary focus is the individual taxpayer. Capital gains and losses, and investment incentives are examined. Tax planning and tax research are introduced.

MESSERE, PEACE

ACC 340 Accounting Information Systems. *Preqs: ACC 320, ACC 310, CSC 200. 3(2-2) F,S.* Systems concepts, including the theory, principles, and controls inherent in accounting information systems analysis, design, and development. Subsystems of the total accounting system including sales/receivable, purchases/payable, cash receipts, cash disbursements, payroll, inventory, and production subsystems. Uses microcomputers.

GRIFFIN

ACC 410 Advanced Financial Accounting. *Preq: ACC 311. Credit may not be received for both ACC 410 and 401. 3(3-0) F.* Complex income measurement issues and disclosure. Valuation and reporting problems related to revenue recognition, earnings per share, tax allocation, pensions, leases, foreign currency translation, accounting changes and error correction. Cash and fund flow reporting and the impact of price level and current value accounting.

FRAZIER, THORNE

ACC 420 Production Cost Analysis and Control. *Preq: ACC 320 and EB 350. Credit may not be received for both ACC 420 and 362. 3(3-0) F,S.* Managerial reporting practices for producing activities, development and use of cost standards and budgets, and cost measurement of productive inputs for units of productive outputs. Managerial use of cost data in analyzing, planning, and controlling business activity. Consideration of information systems and internal controls.

FERRERI, McKEE, ZUCKERMAN

ACC 430 Advanced Income Taxation. *Preqs: ACC 310, 330. Credit may not be received for both ACC 430 and 465. 3(3-0) F.* A second course in federal taxation focusing on the tax treatment of taxpayers other than individuals, and on those property transfers subject to federal and state gift and death taxes. Tax planning—the legal minimization of the tax burden—is emphasized. Tax research methodology is explained and utilized to provide substantive answers to relevant tax problems.

MESSERE, PEACE

ACC 450 Auditing Financial Information. *Preq: ACC 311, EB(ST) 350. Credit may not be received for both ACC 450 and 466. 3(3-0) S.* Objectives, procedures, practices and theory of the examination of financial information; the professional standards and ethical codes of the public accounting profession; features of internal control and EDP systems and other professional topics including overview of internal and operational auditing and SEC requirements; extensive use of professional literature and authoritative pronouncements.

McKEE, SKENDER

ACC 460 Specialized Financial Reporting Theory and Practice. *Preq: ACC 311. 3(3-0) F.* The specialized valuation and reporting problems relating to consolidated financial statements, business combinations and reorganizations, governmental and nonprofit organizations, home office and branch relationships, foreign affiliates, estates and trusts, and business firms experiencing financial difficulties. Study of related professional publications.

ROCKNESS, SKENDER

ACC 470 Accounting Theory. *Preqs: ACC 410, EB 301, EB(ST) 350. Credit may not be received for both ACC 470 and 489. 3(3-0) S.* Major concepts, problem areas and trends in accounting thought and practice, including a review of the most prominent controversies in current publications and the most recent relevant pronouncements of professional institutions.

BUBLITZ, BROOKS

ACC 480 Accelerated Survey of Financial and Management Accounting. *Credit may not be received for both ACC 480 and ACC 220, 280 or 469. Intended for graduate students and advanced undergraduates not in Economics and Business. 3(3-0) F.* Accelerated survey of basic concepts underlying accounting in profit-oriented firms: data measurement, summarization and reporting practices as a background for use of accounting information; content of published financial statements; and uses of accounting for management decisions in product costing, budgeting, and operations.

BROOKS, ZUCKERMAN

ACC 490 Senior Seminar in Accounting. *Preqs: EB 301, 302, EB(ST) 350, ACC 410. 3(3-0).* Emphasis on summarizing and coordinating the students' professional education by increasing their capacity to apply appropriate accounting and economic methods to problem resolution. Enrollment limited to permit individual instruction.

ACC 495 Special Topics in Accounting. *Preq: Consent of Instructor. 1-6.* Presentation of material not normally available in regular course offerings, or offering of new courses on a trial basis.

ACC 498 Independent Study in Accounting. *1-6, F,S,Sum.* Detailed investigation of topics of particular interest to advanced undergraduates under faculty direction on a tutorial basis. Credits and content determined by faculty member in consultation with Associate Department Head.

Selected 500-Level Course Open to Advanced Undergraduates

ACC 520 Advanced Management Accounting. *Preqs: ACC 480, EB (ST) 350 and EB 501. 3(3-0) S.*

AGRICULTURE AND LIFE SCIENCES

ALS 103 Introductory Topics in the Agricultural and Life Sciences. *1(1-0) F. Not open to seniors.* Introduction to scope and objectives of University education. Emphasis on sciences, particularly as related to biology and agriculture. Guest lectures, departmental programs and career opportunities.
CRAIG, OBLINGER

ALS 299H Honors Seminar. *For freshmen and sophomore honor students in SALS (3.0 or better). Enrollment by invitation. 1(1-0) S.* A Seminar program for freshman and sophomore honor students in the School of Agriculture and Life Sciences. Topics for discussion are selected by course participants in each section. Topics vary but are generally contemporary issues. Resource persons from the faculty and/or the broader community are included in most discussions.

ALS 400 External Learning Experience. *Preqs: Junior standing in SALS and prior arrangement. 1-6 F,S.* A learning experience in agriculture and the life sciences within an academic framework that utilizes facilities and resources that are not available on the campus.

ALS (HSS) 490 International Seminar. *Preq: Junior standing. 1(1-0) S.* Cultural, economic and social aspects of developing countries, focusing on factors involved in change and the process of development.
McKINNEY

ALS 499H Honors Research. *For junior and senior students in SALS who have a GPA of 3.0 or better. Participation is by invitation. 1-3 F,S.* A research program for junior and senior students in the School of Agriculture and Life Sciences. Students work with a faculty member on a research project of mutual interest.

ANIMAL SCIENCE

ANS 200 Introduction to Animal Science. *4(3-2) F,S.* The fundamental principles of animal production. The importance of livestock and livestock products in the human diet and in the economy.
ESBENSHADE, RAKES

ANS (PO) 204 Feeds and Feeding. *Preq: Sophomore standing. 4(3-3) S,Sum.* Applied nutrition of livestock and poultry. Digestion and function of nutrients. Classification, processing and use of feedstuffs. Formulation of rations to meet nutritional requirements. Demonstrations of nutritional deficiencies.
ORT, POND, RAMSEY

ANS (FS, NTR) 301 Modern Nutrition. *Preq: Sophomore standing. Food science majors may use as a free elective only. 3(3-0) F,S.* (See NTR—Nutrition.)

ANS 302 Livestock and Dairy Evaluation. *3(2-3) S.* Market classes and grades of beef cattle, swine, and sheep are used to study live animal—carcass value interrelationships. Breed histories, pedigrees and desirable characteristics of meat and dairy animals are discussed.

ANS 303 Principles of Equine Evaluation. *2(1-3) S.* Conformation as it relates to the function, performance and soundness of the horse. Breed standards, rules and regulations pertaining to evaluation, selection and performance. One or two overnight field trips are required.
CORNWELL

ANS 308 Advanced Livestock Judging. *Preq: ANS 302 or ANS 303. May be repeated three times with one credit for each category of livestock covered.* Intensive practice in judging market and purebred meat animals, dairy cattle, or horses. Extensive field trips. Some student expense.

ANS 310 Basic Horse Husbandry. *Cannot substitute for ANS 410 in fulfilling departmental requirements. 3(2-2) F.* Basic principles of horse husbandry; origin, evolution, breeds and functions of horses; basics of feeding, breeding, disease prevention and management. Field trips. **CORNWELL**

ANS 311 Livestock Breeding and Improvement. *Preqs: BS 100, ANS 200. 3(3-0) F.* Principles of genetics applied to the improvement of domestic livestock. Principles of inheritance, phenotypic variation, selection response, breeding value estimation, heterosis, crossbreeding systems and genetic decisions in livestock production systems. **TESS**

ANS (FS, PO) 322 Muscle Foods and Eggs. *Preq: BS 100. 3(2-3) F.* Processing and preserving fresh poultry, red meats, seafoods, and eggs. Ante- and post-mortem events as they affect quality, yield and compositional characteristics of muscle tissues. **BALL**

ANS (FS) 324 Milk and Dairy Products. *Preq: BS 100. 2(2-0) F.* Composition of milk and dairy products, federal standards, raw milk procurement, cleaning and sanitizing and quality attributes. **HANSEN**

ANS 401 Reproductive Physiology. *Preq: ZO 421. 3(2-3) F.* Current concepts of physiology related to mammalian reproduction. Emphasis on physiological processes, how they are influenced by external forces and their importance in reproductive performance. **BRITT**

ANS 402 Beef Cattle Management. *Preq: ANS 204. 3(2-3) S.* Modern management practices emphasizing the application of principles of genetics, ruminant nutrition and animal health to cow-calf programs and to stocker and feeder cattle operations. **HARVEY**

ANS 403 Swine Management. *Preq: ANS 204. 3(2-3) F.* The economic, nutritional, genetic, physiological and managerial factors affecting the operation of modern swine enterprises. Practices for the commercial producer emphasized. Laboratory trips required. **ESBENSHADE**

ANS 404 Dairy Cattle Management. *Preq: ANS 204. 3(2-3) S.* A study of practical dairy husbandry and management. Areas include: raising herd replacements, feed production and utilization, breeding and selection, milking procedures, records and housing. **WILK**

ANS 405 Lactation. *Preq: BS 100. 3(2-3) S.* Gross and microscopic anatomy of the developing and the mature mammary gland. Physiological processes involved in milk secretion and the removal of milk from the gland. Research problem required. **MOCHRIE**

ANS 406 Sheep Management. *Preq: ANS 204. 3(2-3) S. Alt. yrs.* The economic, genetic, nutritional, physiological and managerial factors affecting the operation of the modern sheep enterprise. **POND**

ANS 410 Horse Science. *Preq: ANS 310. 3(2-2) S.* Theory and practical work on the production, care and use of horses with emphasis on nutrition, reproduction, breeding and production in the South. Field trips. **CORNWELL**

ANS 412 Applied Animal Breeding. *Preq: ANS 311. Students may elect to take 1, 2, 3, or 4 of ANS 412 A, B, C, or D. 1-4 S.* Breeding methods for improvement of specific classes of livestock presented as a series of mini-courses. ANS 412A, Applied Beef Cattle Breeding; ANS 412B, Applied Dairy Cattle Breeding; ANS 412C, Applied Swine Breeding; ANS 412D, Genetics and Breeding—Selected Topics.

ANS (NTR, PO) 415 Comparative Nutrition. *Preqs: CH 220 or both 221 and 223. 3(3-0) F.* Principles of nutrition, including the classification of nutrients and the nutrient requirements of and species for health, growth, maintenance and productive functions. **DONALDSON**

ANS (NTR) 419 Human Nutrition in Health and Disease. *Preqs: BCH 451, NTR 415 or FS 400. 3(3-0) S.* (See NTR—Nutrition.)

ANS 490 Seminar in Animal Science. *Preq: Junior standing. 1(1-0) F.* Discussion of current status of various phases of the livestock industry. **LASSITER**

Selected 500-Level Courses Open To Advanced Undergraduates

ANS 500 Advanced Ruminant Nutrition. *Preq: ANS 204 or ANS 415. 3(3-0) Alt. Sum.*

ANS (PHY) 502 Reproductive Physiology of Vertebrates. *Preq: ZO 421. 3(3-0) S.*

ANS (GN) 508 Genetics of Animal Improvement. *Preqs: GN 411, ST 511. 3(3-0) S.*

ANS 510 Advanced Livestock Management. *Preq: ANS 402 or ANS 403 or ANS 404. 3(3-0) S.*

ANS (NTR) 516 Quantitative Nutrition. *Preq: BCH 451 or NTR (ANS) 415 or NTR (ANS) 419 or FS 400. 3(1-6) S.*

ANS 520 Tropical Livestock Production. *Preq: Six hours of ANS at 400-level. 3(3-0) F.*

ANS (NTR) 540 Ruminant Physiology and Metabolism. *Preqs: BCH 451 or 551, ZO 421. 3(3-0) F. Alt. yrs.*

ANS (PHY) 580 Mammalian Endocrine Physiology. *Preqs: BCH 451, ZO 421. 3(3-0) F.*

ANS 590 Topical Problems in Animal Science. *Maximum 6 F,S.*

ANTHROPOLOGY

(Also see SOC—Sociology; SW—Social Work.)

ANT 251 Physical Anthropology. *3(3-0) F,S,Sum.* Introduction to the study of human evolution. Topics include the processes of evolution, human variation and race, behavior and morphology of nonhuman primates, and the fossil record. Emphasis is placed on the study of human biosocial adaptation, past and present, and on humans as culture-bearing primates.

ANT 252 Cultural Anthropology. *3(3-0) F,S,Sum.* Comparative study of contemporary human culture, social institutions and processes that influence behavior. The range of human cultural variation shown throughout the world, including the student's own culture system.

ANT 253 Prehistoric Archaeology. *3(3-0) F,S.* A survey of archaeological methods and the evidence of the origin and growth of man's technology and culture from the Stone Age to the rise of urban civilization. Significant human developments in prehistoric times; such as, fire, big-game hunting, agriculture, warfare, metallurgy, permanent villages, are the basis for study. Prehistory of Africa, Europe and Asia will be emphasized.

ANT 254 Language and Culture. *3(3-0) F,S.* Focuses on the relationship among aspects of human language and between aspects of language and culture. Surveys such topics as: descriptive and comparative linguistics, structuralism, language and thought, sociolinguistics, bilingualism, culture change and linguistic change.

ANT (SOC) 261 Technology in Society and Culture. *3(3-0) F,S.* Processes of social and cultural change with focus on role of technological innovation. Cross-cultural emphasis. Special attention to role of scientists and engineers in socio-cultural change. Social and cultural impact analysis of planned technological change. Topical case studies apply course concepts and principles.

ANT 310 Indians of North America. *Preq: ANT 252 or ANT 311 or HI 365. 3(3-0) F.* Indian peoples and cultures north of the Rio Grande. Theories of origin; selected prehistoric cultural manifestations; people and cultures at the time of European contact; concomitants and ramifications of post-contact cultural change; and contemporary Indian problems and prospects. Eskimos and Aleuts included.

ANT 311 Archaeology of North America. *Preqs: Three hours introductory anthropology or sophomore standing. 3(3-0) F,S.* Reviews archaeological investigations in North America, beginning with the first Stone Age immigrants to cross the Bering Land Bridge and their expansion over the rest of the North American continent. The diversity of early Eskimo and Indian cultures, social and technological developments, and environmental adaptations during the 10,000 years prior to European arrival will be studied.

ANT 325 Peoples and Cultures of South America. *Preqs: Three hours ANT, or HI 215 or HI 216. 3(3-0) F,S.* Introduces student to the types of social groups found in South America, and explores the cultural development from prehistoric times to the present. Analyzes problems facing their developing nations from an anthropological point of view, stressing the interrelationships between the national decision-making processes and the small community.

ANT 330 Peoples and Cultures of Africa. *Preqs: Three hours cultural anthropology or HI 275 or HI 276. 3(3-0) S.* Introduction to African peoples and life styles, especially in sub-Saharan Africa. Examines pre-Colonial cultural and social patterns, the various culture areas, colonialism, and elements of change since independence.

ANT 373 The Human Fossil Record. *Preq: Three hours physical anthropology or archaeology. 3(3-0) F.* Analysis of the human fossil record and consideration of alternate theories of human evolution.

ANT 416 Research Methods in Cultural Anthropology. *Preq: Six hours ANT. 3(3-0) Alt.,S.* A systematic overview of cultural anthropological research methods including designing research projects, research techniques, field work methods, and cross-cultural comparison. Reviews relevant ethical questions and anthropologists' reports of their own field work.

ANT 420 Biological Bases for Human Social Behavior. *Preq: ANT 251, or BS 100 or 105, or GN 301, or equivalent. 3(3-0) S.* This course entails an examination of the relevancy and applicability of animal behavior to the study of human social behavior. The nature and uniqueness of human behavior is evaluated in light of what is known about the social behavior of animals, particularly the nonhuman primates.

ANT 460 Urban Anthropology. *Preq: ANT 252. 3(3-0) F.* Anthropological study of cities. Examination of cross-cultural patterns of behavior in urban areas and adaptive strategies that urban dwellers employ. Introduction to major theoretical and methodological approaches relevant to an understanding of contemporary urbanization.

ANT 470 Archaeological Field Methods. *Preqs: Three hours archaeology, or physical anthropology, or junior standing and consent of instructor; Coreq: ANT 471. 3(1-6) Sum.* A practical introduction to archaeological methods and data recovery-survey, site testing, mapping, and controlled excavation primarily through participation in actual field work. Structured investigation of past human societies: dating, environment, settlement, subsistence, and behavior. Primary research focus determined by the specific archaeological problem under study. Multi-disciplinary methods emphasized. May require off-campus residence.

ANT 471 Archaeological Data Analysis. *Preqs: Three hours archaeology, or physical anthropology, or junior standing and consent of instructor. 3(1-6).* Survey of multidisciplinary analytical methods in archaeology. Analysis of stone tools and lithic technology, ceramic art and technology, spatial and functional analysis of artifacts and structural ruins, subsistence and settlement patterns, paleoecology, resource utilization, etc. Students select individual research problems using previously collected archaeological data. Completed analyses maintained as permanent record of research and/or appended to archaeological site reports.

ANT 498 Special Topics in Anthropology. *Preq: Six hours of SOC/ANT 1-6 F,S,Sum.* Detailed investigation of a special topic in anthropology. Topic and mode of study determined by faculty members and students. Also offered as needed for new courses.

Selected 500-Level Courses Open To Advanced Undergraduates

ANT 505 Comparative Social Organization. *Preq: ANT 501 or 6 hours in cultural anthropology. 3(3-0).*

ANT 508 Culture and Personality. *Preq: ANT 501 or 6 hours in cultural anthropology. 3(3-0).*

ANT 511 Anthropological Theory. *Preqs: ANT 501 or 6 hours in cultural anthropology. 3(3-0).*

ANT 512 Applied Anthropology. *Preq: ANT 252 or CI. 3(3-0).*

ARCHITECTURE

(Also see DN—Design.)

ARC 244 History of American Architecture. *Does not fulfill humanities elective for School of Design students. 3(3-0) S.* Survey of American architecture from Colonial times to the Second World War.

ARC 400 Intermediate Architectural Design (Series). *Preq: DF 102. May not be taken more than six times. 6(0-9) F,S.* Design investigations aimed at the development of an understanding of the major issues confronting the architect and at the expanding of problem-solving abilities in architectural design. Students select from a number of vertically organized workshop studios which offer on an optional basis a wide range of program emphases.

ARC 403 Pregraduate Architectural Design (Series). *Track 3 M. ARCH students only. Maximum of 24 credit hours. 6(0-12) F,S.* Studies in architectural design to prepare students with no formal background for entry into the ARC 600 studio sequence. Studio projects deal with typical issues of building design in a range of scales, with an emphasis on processes and skills.

Selected 500-Level Courses Open To Advanced Undergraduates

ARC 501 Professional Architecture Studio I. *Preqs: BEDA degree or equivalent and CI; 6(0-12). F,S.* Design studio investigations aimed at the development of an understanding of the major issues confronting the contemporary architect and at the expanding of problem-solving abilities in architectural design.

ARC 502 Professional Architecture Studio II. *Preqs: ARC 501; ARC 510 and CI. 6(0-12) F,S.* Design investigations aimed at the development of an understanding of the major issues confronting the contemporary architect and at the expanding of problem-solving abilities in architectural design. This is an individualized, final project studio.

ARC 521, 522 Advanced Architectural Structures I, II. *Preq: (521) DN 352; (522) ARC 521. 3(3-0) F,S.*

ARC 531, 532 Advanced Building Technology I, II. *Preqs: DN 253, 254. 2(1-3) F,S.*

ARC 542 Investigations in Recent World Architecture. *Preq: CI. 3(2-1) F.*

ARC 544 Architectural Conversation. *Preq: Advanced undergrad. in DN or grad. standing. 3(3-0) Alt. S.*

ARC 546 Theory of Building Types. *Preq: Two ARC studios. 3(3-0) F.*

ARC 561 The Practice of Architecture. *3(3-0) F.*

ARC 562 Project Processes in Architecture. *Preq: Sr. or grad. standing. 3(3-0) S.*

ARC 570 Theory of Urban Form. *Preq: Advanced undergrad. 3(3-0) Alt. F.*

ARC 571 Urban Housing. *Preq: Advanced undergrad. 3(3-0) S.*

ARC 581, 582 Conceptual Issues in Architecture and Design. *Preq: Grad. standing or advanced undergrad. 3(3-0) F,S.*

AEROSPACE STUDIES (AIR FORCE ROTC)

(Also see MS—Military Science; NS—Naval Science.)

GENERAL MILITARY COURSES

AS 121 The Air Force Role in the Department of Defense I. *1(1-1) F.* Initial course in the four-year Air Force ROTC curriculum. Familiarizes student with the mission, organization and doctrine of U.S. Air Force and U.S. Strategic Offensive Forces. Introduction to U.S. Strategic Defensive Forces. The laboratory, Corps Training, provides experience in drill movement, knowledge of customs and courtesies expected of an Air Force member, knowledge of Air Force career opportunities, and the life and work of the junior officer.

AS 122 The Air Force Role in the Department of Defense. II. *Preq: AS 121 or equivalent. 1(1-1) S.* Continues study of U.S. Strategic Defensive Forces. Familiarizes student with Aerospace Support Forces and U.S. General Purpose Forces, including those of the Army, Navy and Marines. Corps Training stresses fundamentals needed to capably assume and discharge future responsibilities in AFROTC and the U.S. Air Force.

AS 221 The Development of Airpower I. *Preq: AS 122 or equivalent. 1(1-1) F.* Airpower from the early years of powered flight through World War II. Factors which have prompted research and technological change. Events which show the impact of airpower on strategic thought. Corps training and laboratory provide experiences designed to develop each student's leadership potential and serve as an orientation to active duty.

AS 222 The Development of Airpower II. *Preq: AS 221 or equivalent. 1(1-1) S.* Airpower from the end of World War II to the present. Emphasis on technological change and the events which show the impact of airpower on strategic thought. Corps training and laboratory provide experiences designed to develop each student's leadership potential and serve as an orientation to active duty.

PROFESSIONAL OFFICER COURSES

AS 321 Air Force Management and Leadership. *Preqs: Four year AFROTC Cadet; AS 222. Two year non-veteran student; Satisfactory completion of six weeks summer camp. 3(3-1) F.* A study of management from the point of view of the Air Force junior officer, including the subjects of military leadership and military law. Attention given to progressive development of communicative skills needed by junior officers. Practical experience in advanced military leadership activities.

AS 322 Air Force Management and Leadership II. *Preq: AS 321. 3(3-1) S.* Class and laboratory study of and practical experience with management functions in the military environment. The planning, organizing, directing, controlling and coordinating functions of management; the command and staff functions in advising, problem solving and decision-making situations. Emphasis on developing communicative skills, leadership abilities and basic knowledge required of an Air Force junior officer.

AS 421 American Defense Policy I. *Preq: AS 322. 3(3-1) F.* The role of national security forces in contemporary American society. The professional military as it relates to the American political and social system. Formulation of military policy is examined in terms of international and domestic constraints. A treatment of the development of modern defense strategy. The student studies and practices communicative skills. Corps Training provides for advanced leadership experience.

AS 422 American Defense Policy II. *Preq: AS 421. 3(3-1) S.* Continues the study of national security forces in contemporary American society. Focuses on strategy and management of modern conflict and formulation and implementation of U.S. defense policy. Brief study of the Air Force Officer classification and assignment system. Students develop their communicative skills and participate in advanced leadership situations in Corps Training.

AS 495 Special Topics in Aerospace Studies. *Preq: CI. 2(2-0) F, S.* Offered as needed to treat new or special subject matter relating to the Department of the Air Force.

AS 499 Flight Instruction Program Ground School. *0(1-0) F.* Develops aeronautical knowledge required by the Federal Aviation Administration for private pilots. It familiarizes students with the appropriate general and visual flight rules of Part 91 of the Federal Aviation Regulations, obtaining and evaluating of flight weather reports and flight planning elements such as plotting courses, estimating time enroute and fuel requirements. Required in the Flight Instruction Program (FIP) for Air Force ROTC cadets.

FIELD TRAINING COURSES

AFROTC field training is offered during the summer months at selected Air Force bases throughout the United States. Students in the four-year program participate in four weeks of field training during the summer after their sophomore or junior year. Students applying for entry into the two-year program must successfully complete six weeks of field training prior to enrollment in AFROTC.

Major study areas in the four-week field training program include junior officer training, aircraft and aircrew indoctrination, career-orientation, survival training, base functions and Air Force environment, and physical training.

The six-week field training program covers all four-week training program areas plus all of the subject matter received by four-year program cadets during their freshman and sophomore years in the General Military Course, including corps training.

BIOLOGICAL AND AGRICULTURAL ENGINEERING

BAE 151 Elements of Biological and Agricultural Engineering I. *Enrollment in SBE/SBA. 2(0-5) F.* Topics basic to Biological and Agricultural Engineering. Basic surveying procedures, tool processes, fabrication procedures and properties of materials. Demonstrations and laboratory practice. **BLUM**

BAE 201 Shop Practices. *2(1-3) F,S.* Materials, shop skills, and safety practices essential to the operation and maintenance of a mechanized farm operation or related agricultural industry. Demonstration and hands-on practice through laboratory activity. **ROBERSON**

BAE 211 Farm Machinery. *3(2-3) F,S.* Operation, maintenance, and adjustment of farm machines. Functional and energy requirements related to economic considerations in ownership and efficient operation. **BAUGHMAN**

BAE 241 Computer Applications in Agriculture and Life Sciences. *Preq: MA 112 or MA 114. 3(1-4) F,S.* An introduction to electronic digital computers with emphasis on small low-cost computers and their applications in agriculture and life sciences. **SOWELL**

BAE 252 Elements of Biological and Agricultural Engineering II. *Preqs: BAE 151, MA 201. 4(2-4) S.* The traditional subject areas of agricultural engineering will be introduced and the computer will be used to solve typical problems in each of these areas. **WISER**

BAE 303 Energy Conversion in Biological Systems. *Preqs: BS 100; MA 112 or 102; PY 205 or 211. 2(2-0) S.* Energy transformations and exchanges of plants and animals are studied on the basis of physical theories and principles. Discussion of examples in convection, conduction, radiation, phase change, muscle work, photosynthesis, respiration and concentration of solutions. **SUGGS**

BAE (PM) 312 Principles and Practices of Pesticide Application. *Preqs: PY 211-212 or PY 221, and a course in crop production or crop protection. 3(2-3) F.* Principles and use of application equipment for pesticides according to their purpose and mode of action. Equipment for application of liquid, solid, and gaseous pesticides; and state and federal laws on application and applicator licensing will be covered. Laboratory exercises will include equipment selection, calibration and operation, safety precautions for the applicators, and methods for preventing environmental contamination. **BEASLEY**

BAE (SSC) 321 Water Management. *Preq: Junior standing. 4(3-3) F.* Water management principles applied to agriculture: hydrologic cycle, runoff, surface and subsurface drainage, soil conservation measures to reduce erosion and sedimentation, irrigation, pond construction, open channel flow, water rights, environmental laws pertaining to water management, and basic surveying principles. SNEED

BAE 332 Farm Structures. *Preq: PY 211 or 221. 3(2-3) S.* Environmental relationships, design methods, materials, construction procedures and layout practices as they relate to current changes in agricultural production techniques. Problem situations relating to farm structures are investigated individually by each student in the laboratory. Emphasis on relating the theory to current applications. BLUM

BAE 341 Farm Electrification and Utilities. *Coreq: PY 212 or 221. 4(3-3) S.* Practical and efficient use of electricity as an energy source for agricultural and home applications. Energy conservation, electric rates, farm and house wiring, circuit design, single phase and three-phase distribution systems, electric motors, lighting, heating, electric controls, safety and protective devices, and home water systems. GLOVER

BAE 342 Agricultural Processing. *Preqs: MA 301, MAE 301, MAE 308. 4(3-2) S.* Theory and application of heat and mass transfer to processing of agricultural crops. Topics include conduction, convection, radiation psychometrics, thin layer drying, deep-bed drying, and continuous-flow drying. Problem sessions will demonstrate principles of air flow, fans, pumps, process control, and various drying systems. YOUNG

BAE 361 Analytical Methods. *Preqs: BAE 252, MAE 208, MAE 314, MA 301. 3(2-2) S.* Engineering problem solving through studies of topics in mechanical design. Topics include kinematic analysis of linkages, analysis and design/selection of machine structures and power transmission components, including hydraulics. STIKELEATHER

BAE 391 Electrotechnology in Biological and Agricultural Engineering. *Preq: ECE 211. 3(2-3) F.* Fundamental concepts of AC power distribution, grounding, motor selection. Basic principles and characteristics of transducers, amplifiers, power supplies, and read-out devices in measurement systems. Introduction of concepts for designing relay switching. Applications to agricultural problems. McCLURE

BAE 411 Farm Power and Machinery. *Preqs: CH 101; BAE 211; PY 211 or 221. 3(2-3) S.* Internal combustion engines, gasoline and diesel. Thermodynamic principles and their application to engine cycles, efficiency, design and operation. Fuel, electrical, cooling, lubrication and other engine systems needed for practical power production. Power trains and hydraulic systems used on farm tractors. Farm machinery power management principles. BOWERS

BAE 433 Processing Agricultural Products. *Preq: PY 212. 4(3-3) S.* Application of the principles of fluid flow, heat transfer, refrigeration, psychometrics, and materials handling to the processing of agricultural products. Pump sizing, heat exchanger selection, refrigeration analysis, fan sizing, crop drying, and selection of materials handling equipment. WILLITS, YOUNG

BAE 451 Agricultural Engineering Design I. *Preq: Senior standing. Completion of junior year BAE requirements in SBE/SBA curriculum. 4(1-6) F.* Design concepts are applied to current agricultural engineering problems. One major design project is combined with a variety of case studies and short term design problems. ROHRBACK

BAE 452 Agricultural Engineering Design II. *Preq: BAE 451. 2(0-4) S.* Continuation of BAE 451. The major design problem solution is evaluated under actual problem conditions and the student is required to assess the effectiveness of the design. ROHRBACK

BAE 461 Analysis of Agricultural Systems. *Preqs: MA 114 or 112, EB 212 or 201. 3(2-2) F.* Basic concepts, tools and methodology of systems analysis with application to agricultural problems. Economics of decision making, linear programming, and machinery management, including cost analysis, scheduling, selection, and replacement. SOWELL

BAE 462 Functional Design of Field Machines. *Preq: BAE 361, Coreq: ST 361. 3(2-3) S.* Design of modern farm tractors and field machines that make effective use of energy and

labor in farm commodities production. Topics include (a) engine cycles, Nebraska test procedures, traction efficiencies, rolling resistances, and hitching of tractors and (b) principles and devices used to accomplish functional objectives in tillage, planting, pesticide application, and harvesting equipment. BOWEN, BOWERS

BAE (CHE) 465 Introduction to Biomedical Engineering. *Preqs: MA 202 or MA 212, PY 212 or PY 208. 3(3-0) S.* (See chemical engineering).

BAE 471 Soil and Water Engineering. *Preqs: BS 100, SSC 200, MAE 308. 4(3-2) F.* Aspects of hydrology, soil-water-plant relationships, soil and water conservation engineering, drainage, irrigation, and agricultural water pollution. Applications of hydraulics, pipe flow and open channel flow principles in design of soil and water conservation structures, and agricultural water management. WESTERMAN

BAE 481 Agricultural Structures and Environment. *Preqs: BAE 342, MAE 314. 4(3-3) F.* Principles of environmental control and structural analysis are combined with biological principles for the design of agricultural structures. Topics include structural analysis, load estimation, material selection, fasteners, physiological reactions of animals and plants to their environment, applications of heat transfer and psychrometrics in calculating ventilation requirements, heating or cooling loads, and farmstead planning. BAUGHMAN

BAE 490 Special Topics in Biological and Agricultural Engineering. *Preq: Consent of Instructor. 1-3 F,S,Sum.* Offered as needed to present new or special Biological and Agricultural Engineering subject matter.

Selected 500-Level Courses Open To Advanced Undergraduates

BAE 552 Instrumentation for Agricultural Research and Processing. *Preqs: ECE 331, MA 301. 2(1-3) Alt. F.*

BAE (CE, MB) 570 Sanitary Microbiology. *Preq: MB 401 or equivalent. 3(2-3) S.*

BAE (CE) 578 Agricultural Waste Management. *Preq: Grad. or advanced undergrad. standing. 3(2-3) Alt. F.*

BAE (FS) 585 Food Rheology. *Preqs: FS 331 or MAE 314. 3(2-3) Alt. F.*

BAE 590 Special Problems. *Preq: Sr. or grad. standing in biological and agricultural engineering. Credits arranged.*

BIOCHEMISTRY

BCH 451 Introductory Biochemistry. *Preq: CH 223. 3(3-0) F,S,Sum.* An introduction to the fundamentals of biochemistry and molecular biology, dealing with the chemistry of living organisms, structures and interactions of biomolecules, and a synopsis of various areas of research the discipline encompasses.

BCH 452A Introductory Biochemistry Laboratory. *Preq. or Coreq: BCH 451. 1(1-3) F,S.* Laboratory experience to complement BCH 451, with emphasis on laboratory techniques and analysis of data. KAHN, KNOPP

BCH 452B Introductory Biochemistry Laboratory. *Preq. or Coreq: BCH 451. One period per week for full semester. 2(1-3) F,S.* Laboratory experience to complement BCH 451, including experiments from BCH 452A, plus additional experiments in buffer theory and applications, blood protein separations, chromatography and electrophoresis, antibody-binding, radioimmunoassay, nucleic acids. KAHN, KNOPP

BCH 490 Special Studies in Biochemistry. *Preq: Senior standing. 1-3 F,S,Sum.* Individualized, advanced undergraduate studies in biochemistry.

Selected 500-Level Courses Open To Advanced Undergraduates

BCH 551 General Biochemistry I. *Preq: CH 223 or equivalent and one semester of introductory biochemistry (BCH 451 or equivalent); one semester of physical chemistry would be helpful. 3(3-0) F.*

BCH 552 Experimental Biochemistry. *Preq: CH 223; CH 315 recommended; Preq. or Coreq: BCH 551. 3(1-6) F.*

BCH 554 Radioisotope Techniques in Biology. *Preq: BCH 451 or CI. 2(1-3) Sum.*

BCH (GN) 561 Biochemical and Microbial Genetics. *Preqs: BCH 451 or 551, GN 411 or 505, MB 401 or equivalent. 3(3-0) F.*

BCH 590 Special Topics in Biochemistry. *Preq: BCH 451 or equivalent. Credits arranged, maximum 3. F,S,Sum.*

BIOMATHEMATICS

BMA (BO) 567 Modeling of Biological Systems. *Preq: MA 112. 4(3-2) F.*

BMA (MA, ST) 571 Biomathematics I. *Preq: Advanced calculus, reasonable background in biology or CI. 3(3-0) F.*

BMA 591 Special Topics. *Preq: CI. Maximum 3. F,S,Sum.*

BOTANY

BO 200 Plant Life. *4(3-3) F,S,Sum.* An introduction to botany. Emphasis is placed on the structure, processes, and reproduction of the higher plants. Also treated are the diversity of the plant kingdom and principles of inheritance, ecology and evolution. May serve as a terminal course or as an introduction to further study in botany. STUCKY

BO (ZO) 360 Introduction to Ecology. *Preq: A 200 level biology course. 3(3-0) F,S,Sum.* Relationships between organisms and environment, and interactions among organisms. Emphasis on basic principles, including energy flow, nutrient cycling, community structure and organization, succession, and population dynamics. Ecological consequences of human activities. MOZLEY, WENTWORTH

BO (ZO) 365 Ecology Laboratory. *Coreq: BO (ZO) 360. 1(0-3) F,S,Sum.* Laboratory coordinated with BO (ZO) 360 lecture, illustrates basic principles of environmental measurement, data analysis, limiting factors, adaptation, biogeography, succession, populations, communities, ecosystems, and competition and predation by means of field trips and laboratory experiments. MOZLEY, WENTWORTH

BO 400 Plant Diversity. *Preq: BO 200. 4(3-3) F.* A comprehensive survey of the vegetative and reproductive diversity of the plant kingdom. Emphasis is placed on evolutionary trends, adaptive strategies, and bases for assumed phylogenetic relationships, considering fossil as well as living forms. HARDIN

BO 403 Systematic Botany. *Preq: BS 100 or 105 or BO 200. 4(2-4) S.* Systematic survey of vascular plants, emphasizing terminology, family characteristics, field identification, general evolutionary relationships, and mechanisms of plant speciation. HARDIN, STUCKY

BO 413 Introductory Plant Anatomy. *Preq: BO 200 or equivalent. 3(2-3) S.* A study of the cells, tissues and organs of crop, horticultural and weed plants. The patterns of growth and differentiation of representative species will be examined. Laboratory work will emphasize microscopic examination of living material. ANDERSON

BO (ZO) 414 Cell Biology. *Preqs: CH 223, PY 212, ZO 201, or 203. 3(3-0) F.* (See zoology.)

BO 421 Plant Physiology. *Preqs: BS 100 or BS 105 or BO 200, one year of college chemistry. 4(3-3) F,S.* Physiology of the green plant emphasizing plant organization, water and solute relationships, organic and inorganic nutrition, growth and development. FITES, TROYER

BO 495 Special Topics in Botany. *Preqs: 8 hrs. of Botany courses. 1-6 F,S,Sum.* Individualized study, under faculty supervision, of botanical topics in the student's area of interest and not covered in existing courses. Development of a new course on a trial basis.

Selected 500-Level Courses Open To Advanced Undergraduates

BO 510 Plant Anatomy. *Preq: BO 200. 4(2-6) F.*

BO 522 Advanced Morphology and Phylogeny of Seed Plants. *Preq: BO 403. 4(3-3) F. Odd yrs.*

BO 524 Grasses, Sedges, and Rushes. *Preq: BO 403. 4(2-6) F.*

BO (CS, ENT, PM, PP) 525 Biological Control. *Preqs: ENT 312 or 425, and CS 414 or PP 315. 4(3-3) F. Odd yrs.*

BO 544 Plant Geography. *Preqs: BO 403, BO (ZO) 360, GN 411 or equivalents. 3(3-0) S. Even yrs.*

BO 551 Advanced Plant Physiology I. *Preqs: BO 421 or equivalent. 3(3-0) F.*

BO 552 Advanced Plant Physiology II. *Preq: BO 421 or equivalent and biochemistry. 3(3-0) S.*

BO 553 Laboratory in Advanced Plant Physiology I. *Preq. or coreq: BO 551. 1(0-3) F.*

BO 554 Laboratory in Advanced Plant Physiology II. *Preq. or coreq: BO 552. 1(0-3) S.*

BO (ZO) 560 Principles of Ecology. *Preq: Three semesters of college level biology courses. 4(3-3) F.*

BO 561 Physiological Ecology. *Preqs: BO 421 and BO (ZO) 560 or equivalent. 4(3-3) S. Odd yrs.*

BO 565 Plant Community Ecology. *Preq: BO (ZO) 560 or BO (ZO) 360 or equivalent. 4(3-3) F.*

BO (BMA) 567 Modeling of Biological Systems. *Preq: MA 112. 4(3-2) F.*

BO (MB) 574 Phycology. *Preq: BS 100 or BO 200. 3(1-4) S. Odd yrs.*

BO (MB, PP) 575 The Fungi. *Preq: BO 200 or equivalent. 3(3-0) F.*

BO (MB, PP) 576 The Fungi—Lab. *Coreq: BO 575. 1(0-3) F.*

BO 590 Topical Problems. *Preq: CI. 1-3 F,S.*

BIOLOGICAL SCIENCES

BS 100 General Biology. *Students may not receive credit for both BS 100 and BS 105. 4(3-3) F,S,Sum.* Basic principles and concepts of biology, including the structure and function of cells and organisms, development, heredity, evolution, and ecology.

BECKMANN, FEAVER, LYTLE, PARKER

BS 105 Biology in the Modern World. *Students may not receive credit for both BS 100 and BS 105. 4(3-3) F,S.* For students who are not science majors. Treats the broad themes or principles of biology, such as metabolism, homeostasis, and interrelationships of organisms, at all levels of biological organization (i.e., molecular to biome). Emphasis on the organismic level with man as the representative organism; his physiology, behavior, genetics and ecology are treated in depth.

FEAVER, WYNN

BS 292 Special Topics in Life Science. *Preq: Permission of Instructor. 1-3 F,S.* Special interest courses and trial offerings of new or experimental courses in life science.

BS 491 Seminar on Professional Development in Biological Sciences. *1(1-0) F.* Planning and analyzing strategies for professional development in the biological sciences utilizing discussion, guest lecturers, and field trips to nearby research laboratories and industrial plants. Intended primarily for juniors and seniors in any biological discipline.

BS 495 Special Topics in Biology. 1-6 F,S,Sum. Independent study projects in biology conducted under the supervision of a faculty member and experimental courses in biological science. Student projects to be selected with the assistance of an appropriate faculty member and with the approval of the Coordinator of the Biological Science Program.

Selected 500-Level Courses Open To Advanced Undergraduates

BS 510 Advanced Biology for Secondary Teachers. *Preq: Two years of college biology. 6(4-6) Sum.*

BS 590 Special Problems in Biological Instrumentation. *Preq: CI. 1-3 F,S.*

CIVIL ENGINEERING

CE 201 Elements of Plane Surveying. *Preq: Soph. standing. Not for CE or CEC department majors. 3(2-3) F.* Theory and practice of plane surveying including precision specifications, horizontal and vertical control, stadia surveys, area determinations, circular and compound curves, topographic mapping, earthwork, and construction surveys.

CE 202 Computer Applications in Civil Engineering. *Preq: MA 201. Must be taken not later than fifth semester of CE curriculum (first semester of junior year). 3(2-2) F,S,Sum.* Introduction to methodical problem solving, emphasizing computer programming with applications in Civil Engineering specialty areas. **GALLER**

CE 213 Introduction to Mechanics. *Coreq: MA 202. Not for CE department majors. 3(3-0) F,S,Sum.* Introductory study of the state of rest or motion of bodies subjected to the action of forces. The nature and properties of force systems, free body diagrams, the concepts of equilibrium, the motion of particles, the role of Newton's laws, the conservation principles in mechanics, and mechanical vibrations. **HORIE**

CE 214 Engineering Mechanics-Statics. *Preq: PY 205; Coreq: MA 202. 3(3-0) F,S,Sum.* Basic force concepts and equilibrium analysis; distributed forces; centroids; moments of inertia; application to structural elements. **BINGHAM**

CE 215 Engineering Mechanics-Dynamics. *Preq: A grade of C or better in CE 214; Coreq: MA 301. 3(3-0) F,S,Sum.* Kinematics and kinetics of particles; plane kinematics and kinetics of rigid bodies; simple vibrations and selected topics from three-dimensional rigid body dynamics, steady and variable mass flow, and orbital motion. **ELY**

CE 301 Engineering Surveying. *Preq: CE 202 and junior standing in CE or CEC. 3(2-3) F,S.* The elements of plane surveying, topographical surveying, horizontal and vertical curves, construction surveys, earthwork, photogrammetry, property and subdivision surveys, route surveying and state coordinate system. **HORN**

CE 305 Traffic Engineering. *Preq: CE 301. 3(2-2) F,S.* Integrated approach to planning, design, and operation of transportation systems with an emphasis on highway and street systems. Roadway design, traffic operations and performance, and control systems. **CRIBBINS, STONE**

CE 313 Mechanics of Solids. *Preq: A grade of C or better in CE 214; Coreq: MA 301. 3(3-0) F,S,Sum.* Elementary analysis of deformable solids subjected to force systems. Concepts of stress and strain; one, two and three-dimensional stress-strain relationships for the linear elastic solid. Statically determinate and indeterminate axial force, torsion and bending members. Stress transformations, pressure vessels, combined loadings. Introduction to column buckling. **DOUGLAS**

CE 324 Structural Behavior Measurement. *Preq: MAT 200; Coreq: CE 325. 1(0-3) F,S,Sum.* Introduction to experimental techniques: strain measurement in structural members, strain and displacement measurements in frames and trusses, frequency and damping measurements in beams. Where appropriate, experimental results will be applied to theoretical predictions. **BINGHAM, MATZEN**

CE 325 Structural Analysis. *Preq: CE 202 and CE 313. 3(3-0) F,S.* Analysis of internal forces of statically determinate trusses, beams and framed structures. Analysis of deformations by methods of virtual work and conjugate beam. Indeterminate structural analysis of trusses, beams and rigid frames by force and displacement methods.

BINGHAM, ELY, SMITH, TUNG

CE 326 Structural Engineering I. *Preq: CE 325. 5(4-2) F,S,Sum.* Fundamental principles of elastic, inelastic and ultimate strength analysis and proportioning of structural members in metal and concrete.

AHMAD, GUPTA, NAU, SMITH

CE 327 Reinforced Concrete Design. *Preqs: CE 325, CE 332. 3(3-0) F,S,Sum.* Behavior, strength, and design of reinforced concrete members subjected to moment, shear, and axial forces. Introduction to the design of reinforced concrete structures.

AHMAD, NAU, SCHULTZ, SMITH

CE 332 Materials of Construction. *Preq: MAT 200 and CE 202. 3(2-3) F,S,Sum.* Manufacture and properties of mineral and bituminous cements and mineral aggregates. Mechanical properties and durability of portland cement concrete, bituminous mixtures, masonry units, timber products, and miscellaneous construction materials. Materials testing.

KHOSLA

CE 333 Properties of Construction Materials. *Preq: CE 313. Not open to students enrolled in B.S. in Civil Engineering or Civil Engineering-Construction Option programs. A student may not receive credit for both CE 332 and CE 333. 3(2-3) F.* Manufacture and properties of mineral and bituminous cements and mineral aggregates. Mechanical properties, durability and testing of portland cement concrete, brick, bituminous mixtures, timber products, and steel.

KHOSLA

CE 342 Engineering Behavior of Soils and Foundations. *Preq: CE 313; Coreq: CE 332. 4(3-2) F,S, Sum.* Soil properties and mechanics of analysis related to engineering behavior of soils. Includes soil identification, classification, index properties, effective stress concepts, settlement analysis, evaluation of shear strength and bearing capacity, and fundamentals of foundation selection and design.

BORDEN, LAMBE, RAHMAN

CE 365 Construction Methods and Management. *Preqs: CE 202 and Jr. standing. 3(3-0) F,S.* Introduction to construction engineering emphasizing heavy and highway construction: the construction industry, contract construction, project planning and scheduling; construction equipment, methods and management; safety and environmental health in construction.

FARID, RUST

CE 375 Civil Engineering Systems. *Preq: CE 202; Coreqs: MA 301, IE 311. 3(3-0) F,S.* A broad, systematic approach to civil engineering planning, analysis, and design for large scale projects in construction, structures, transportation, water resources and other civil engineering areas.

GALLER, McDONALD, STONE

CE 382 Hydraulics. *Preq: CE 202, CE 215, MA 301 4(3-3).* Fluid properties; mass, energy and momentum conservation laws; dimensional analysis and modeling; laminar and turbulent flows; surface and form resistance; flow in pipes and open channels; elementary hydrodynamics; fluid measurements; characteristics of hydraulic machines.

AMEIN, McDONALD, OVERTON

CE 383 Hydrology and Urban Water Systems. *Preq: CE 382. 3(3-0) F,S.* Engineering hydrology and design of elements of urban water systems. Applications in stormwater collection, channel design, flood control and water supply. Effects of watershed development on quantity and quality of streamflow.

FISHER, MALCOM

CE 400 Transportation Engineering Project. *Preqs: CE 375, CE 406. 3(1-4) F,S.* Integrated team approach to design of major transportation engineering projects. Professional topics in transportation engineering practice.

CRIBBINS, HORN, STONE

CE 406 Transportation Systems Engineering. *Preq: CE 305. 3(3-0) F,S.* Multi-modal transportation systems; railroads, airports, highways, and other modes. Planning, analysis, and design. Fundamental concepts; supply, demand, flows, impacts, and network optimization.

STONE

CE 411 Engineering Cybernetics. *Preq: Senior standing in engineering or equivalent background. 3(1-4) F,S.* Topics in linear and non-linear systems; hereditary and feedback couplings; continuous, discrete, random and stochastic inputs; system stability; reliability; optimization; and the ultra-stable autonomous system. Student participation individually or collectively, in the design of engineering systems. McDONALD

CE 420 Structural Engineering Project. *Preqs: CE 327, CE 375, CE 426. 3(2-2) F,S.* Planning, analysis and design of complete structural systems composed of steel and reinforced concrete. Professional topics in structural engineering practice. NAU, SMITH

CE 425 Intermediate Structural Analysis. *Preq: CE 325. 3(3-0) F,S.* A rigorous treatment, at intermediate level, of indeterminate structural analysis. Coverage includes methods for calculating displacements, force and displacement methods of indeterminate analysis, approximate methods of indeterminate analysis, Maxwell-Betti reciprocal theorem, qualitative influence lines, and introduction to structural vibrations. MATZEN

CE 426 Structural Steel Design. *Preq: CE 325. 3(3-0) F,S.* Design and behavior of structural steel members and their connections subjected to moment, shear, and axial forces. Introduction to the design of steel structures. NAU, SCHULTZ, SMITH

CE 428 Structural Design in Wood. *Preq: CE 326. 3(2-2) F.* Structural behavior of wood under loads; design of structural elements in wood; strength properties of wood fasteners; design projects with clear wood, plywood and glued-laminated wood. SCHULTZ

CE 440 Geotechnical Engineering Project. *Preqs: CE 375; CE 443. 3(1-4) F,S.* Integrated team approach to major geotechnical engineering projects involving site selection, analysis and design of foundations and earth structures, establishment of performance criteria, economic analysis, identification of potential construction problems, and matters regarding professional practice and ethics. BORDEN, LAMBE, RAHMAN, WAHLS

CE 443 Seepage, Earth Embankments and Retaining Structures. *Preq: CE 342. 3(3-0) F,S.* Review of shear strength concepts; ground water hydraulics; slope stability; lateral earth pressure problems; placement of fills. LAMBE

CE 450 Civil Engineering Design. *Preqs: CE 305, CE 326, CE 342 and CE 383. 3(1-6) F,S.* Integrated team approach to a major civil engineering project involving planning, design and analysis under realistic conditions including environmental factors.

CE 460 Construction Engineering Project. *Preqs: CE 463, senior standing; Coreq: CE 464, CE 466. F,S.* Integrated approach by student teams to design, estimating, planning, scheduling, and management of construction projects.

CE 463 Cost Analysis and Control. *Preq: CE 365. 3(2-3) F,S.* Principles of cost engineering, project estimating, bid procedures, construction cost analysis and control. FARID, JOHNSTON, TUCKER

CE 464 Legal Aspects of Contracting. *Preq: Sr. standing. 3(3-0) F,S.* Legal aspects of contract documents, drawings and specifications; owner-engineer-constructor relationships and responsibilities; bids and contract performance; labor laws; governmental administrative and regulatory agencies; torts; business organizations; ethics and professionalism.

CE 466 Building Construction Engineering. *Preqs: CE 327 and CE 365; Coreq: CE 426. 3(2-2) F,S.* An introduction to building design and construction including organization and management, the building development process, materials and methods of building construction. JOHNSTON

CE 480 Water Resources Engineering Project. *Preqs: CE 305, CE 342, CE 375, CE 383; Coreq: CE 484. 3(1-4) F,S.* Engineering design of selected projects in water resources engineering, involving interactions with other CE specialty areas. Project subjects include sitework, floodwater reservoirs, and one selected by the student. Professional topics in water resources engineering practice. MALCOM

CE 484 Water Supply and Waste Water Systems. *Preq: CE 383. 3(3-0) F,S.* The elements of the design of water supply and wastewater disposal systems. CHAO, BORDEN

CE 498 Special Problems in Civil Engineering. *Preq: Sr. standing. 1-4 F,S.* Directed reading in the literature of civil engineering, introduction to research methodology, seminar discussion, dealing with special civil engineering topics of current interest.

Selected 500-Level Courses Open To Advanced Undergraduates

CE 501 Transportation Systems Analysis. *Preq: CE 406. 3(3-0) F.*

CE 502 Transportation Operations. *Preq: CE 406. 3(3-0) S.*

CE 503 Transportation Design. *Preq: CE 406. 3(2-3) S.*

CE 504 Water Transportation. *Preq: CE 305. 3(3-0) F.*

CE 505 Mass Transportation. *Preq: CE 406. 3(3-0) S.*

CE 506 Municipal Engineering Projects. *Preq: Sr. standing in CE or CEC. 3(2-3) S.*

CE 507 Airphoto Analysis I. *Preq: Sr. standing. 3(2-3) S.*

CE 511, 512 Continuum Mechanics I, II. *Preqs: CE 313 or MAE 314, CE 382 or MAE 308, MAE 301, MA 405. (511) 3(3-0) F; (512) 3(3-0) Alt. S.*

CE 513 Theory of Elasticity I. *Preq: CE 313 or MAE 314. 3(3-0) S.*

CE 521 Advanced Strength of Materials. *Preq: CE 313 or MAE 314. 3(3-0) F.*

CE 522 Elastic Stability. *Preqs: CE 521, MA 301, 405. 3(3-0) S.*

CE 524 Analysis and Design of Masonry Structures. *Coreq: CE 420. 3(3-0) Alt. F.*

CE 525 Matrix Structural Analysis. *Preq: CE 425. 3(3-0) F.*

CE 526 Finite Element Methods for Civil Engineering. *Preqs: CE 425 and prior programming knowledge. 3(3-0) S.*

CE 527 Analysis and Design of Structures for Dynamic Loads. *Preq. or coreq: CE 525. 3(3-0) F.*

CE 531 Structural Models. *Preq: CE 420. 3(2-3) F.*

CE 534 Plastic Analysis and Design. *Preq: CE 420. 3(3-0) S.*

CE 536 Theory and Design of Prestressed Concrete. *Coreq: CE 420. 3(3-0) F.*

CE (MEA) 541 Gravity Wave Theory I. *Preq: MAE 308 or PY 411. 3(3-0) S.*

CE 543 Hydraulics of Ground Water. *Preq: CE 382 or 342 or equivalent. 3(3-0) S.*

CE 544 Foundation Engineering. *Preq: CE 342. 3(3-0) S.*

CE 548 Engineering Properties of Soils I. *Preq: CE 342. 3(2-3) F.*

CE 551 Theory of Concrete Mixtures. *Preq: CE 332. 3(3-0) F.*

CE 553 Asphalt and Bituminous Materials. *Preq: CE 332. 3(2-3) S.*

CE 555 Highway and Airport Pavement Design. *Preq: CE 406 or 443. 3(2-3) F.*

CE 561 Construction Planning and Scheduling. *Preq: CE 463. 3(3-0) F.*

CE 562 Construction Productivity. *Preq: CE 463 or equivalent. 3(3-0) F.*

CE 566 Building Construction Systems. *Preq: CE 466 or CE 420 or grad. standing in ARC. 3(3-0) S.*

CE (BAE, MB) 570 Sanitary Microbiology. *Preq: MB 401 or equivalent. 3(2-3) S.*

CE 575 Civil Engineering Systems. *Preq: MA 405. 3(3-0) S.*

CE 576 Atmospheric Pollution. *Preq: Grad. or advanced undergrad. standing. 3(3-0) S.*

CE (BAE) 578 Agricultural Waste Management. *Preq: Grad. or advanced undergrad. standing. 3(2-3) Alt. F.*

- CE 580 Flow in Open Channels.** *Preq: CE 382. 3(3-0) F.*
- CE 582 Coastal Hydrodynamics.** *Preq: CE 382 or equivalent. 3(3-0) F.*
- CE 583 Engineering Aspects of Coastal Processes.** *Preq: CE 382 or equivalent. Coreq: MEA (CE) 541. 3(3-0) S.*
- CE 585 Urban Stormwater Management.** *Preq: CE 383. 3(3-0) F.*
- CE 589 Special Topics in Civil Engineering.** *3(3-0) F,S.*
- CE 591, 592 Civil Engineering Seminar.** *1(1-0) F,S.*
- CE 598 Civil Engineering Projects.** *1-6 F,S.*

CHEMISTRY

- CH 101 General Chemistry I.** *Preq: MA 111 with a grade of C or better. 4(3-3) F,S,Sum.* Fundamental chemical concepts of composition and stoichiometry; atomic structure; bonding and molecular structure, including stereochemistry; chemical reactions; states of matter, including solutions. Should be followed by CH 103, 105, or 107.
- CH 103 General Chemistry II.** *Preq: CH 101. 4(3-3) F,S,Sum.* Terminal course for students in curricula which do not require full-year chemistry courses beyond the freshman level. Acid-base reactions, homogeneous and heterogeneous equilibria, electrochemistry, and descriptive aspects of inorganic, organic, nuclear and biochemistry.
- CH 104 Experimental Chemistry.** *Preq: CH 101; Coreq: CH 105. 1(0-3) F,S,Sum.* Laboratory supplement to CH 105. Required for CH 105 students who plan to take additional chemistry courses.
- CH 105 Chemistry Principles and Applications.** *Preq: CH 101 with a grade of C or better. Credit cannot be received for both CH 105 and either CH 103 or CH 107. 3(3-0) F,S,Sum.* A continuation of CH 101, intended primarily for engineering students. Emphasis on introductory chemical thermodynamics, equilibrium, electrochemistry, chemical kinetics, and the application of basic chemical principles to the treatment of organic and inorganic systems. CH 105 serves as prerequisite for additional chemistry courses only if supplemented by CH 104.
- CH 106 Laboratory Techniques I.** *Coreq: CH 101M. 1(0-3) F.* Experiments and extended laboratory projects that involve a wide variety of techniques used in quantitative chemistry. Instrumentation introduced and maintenance of laboratory records included.
- CH 107 Principles of Chemistry.** *Preq: CH 101 with a grade of C or better. 4(3-3) F,S.* Emphasizes detailed quantitative aspects of solution stoichiometry, kinetics, equilibrium, electrochemistry and thermodynamics and the treatment of acid-base chemistry.
- CH 108 Laboratory Techniques II.** *Coreq: CH 107M. 1(0-3) S.* A supplement to the CH 107 laboratory, for students majoring in Chemistry. Experiments and extended laboratory projects involving a wide variety of techniques used in quantitative chemistry. Instrumentation and computer applications and maintenance of laboratory records.
- CH 111 Foundations of Chemistry.** *4(3-2) F,S,Sum.* Designed to acquaint the non-science majors with the basic subject matter of chemistry and to indicate how this knowledge relates to their professions. Selected chemical concepts are developed in depth with both fundamental principles and practical consequences given nearly equal weight.
- CH 220 Introductory Organic Chemistry.** *Preqs: CH 103 or 107, or CH 104 in place of 105. Credit is not allowed for both CH 220 and CH 221. 4(3-3) F,S,Sum.* A one-semester course in the fundamental principles of organic chemistry. Preparation, reactions, and physical properties of alkanes, cycloalkanes, alcohols, alkyl halides, aromatic compounds, aldehydes, ketones, organic acids, acid derivatives, and amines.

CH 221 Organic Chemistry I. *Preq: CH 107. Credit is not allowed for both CH 220 and CH 221. 4(3-3) F,S,Sum.* First half of two semester sequence in the fundamentals of modern organic chemistry. Structure and bonding, stereochemistry, reactivity and synthesis of carbon compounds. Detailed coverage of aliphatic hydrocarbons, alcohols, ethers, and alkyl halides. Introduction to spectral techniques.

CH 223 Organic Chemistry II. *Preq: CH 221. 4(3-3) F,S,Sum.* Second half of a two semester sequence in modern organic chemistry. Continuation of mechanistic approach to reactions and synthesis of organic compounds. Detailed coverage of carbonyl compounds (aldehydes, ketones, acids), aromatic chemistry and amines. Spectral techniques employed throughout.

CH 315 Quantitative Analysis. *Preqs: CH 103 or 107, or CH 104-105. 4(3-3) F,S,Sum.* Fundamental principles and modern techniques of chemical analyses: spectrochemical, electrochemical, and volumetric methods of analysis, modern chemical instrumentation, and interpretation of data.

CH 331 Introductory Physical Chemistry. *Preqs: CH 103 or 107, or CH 104-105; MA 201 or 212; PY 205 or PY 211 or PY 221. 4(3-3) F,S.* Basic physicochemical principles including chemical thermodynamics, physical and chemical equilibrium, electrochemistry and reaction kinetics. For students who require only a single semester of physical chemistry.

CH 401 Systematic Inorganic Chemistry. *Coreq: CH 431 or CH 331. 3(3-0) S.* Studies of theoretical principles and discussions of experimental synthetic, purification, and identification procedures pertaining to inorganic substances. The physical and chemical behavior of inorganic compounds is also discussed.

CH 411 Analytical Chemistry I. *Preq: CH 434. 4(2-6) F.* Methods of quantitative analysis based on solution chemistry and an introduction to transducers and electronic components used in chemical instrumentation. The laboratory emphasizes the precision obtainable with both classical and instrumental methods in analytical chemistry.

CH 413 Analytical Chemistry II. *Preq: CH 411. 4(2-6) S.* A survey of instrumental methods in analytical chemistry. Emphasis is given to the physical-chemical basis for instrument operation as well as instrumental design. Electrochemistry, spectroscopy, and chromatography are the primary topics covered.

CH 428 Qualitative Organic Analysis. *Preq: CH 223. 3(1-6) F,S.* Introduction to the systematic identification and separation of organic compounds by the application of both physical and chemical techniques. Infrared and nuclear magnetic spectroscopy, chemical classification tests, and the preparation of derivatives are used to acquaint the student with organic research methods.

CH 431 Physical Chemistry I. *Preqs: CH 107, MA 202, PY 203 or 208; Coreq: MA 301. 3(3-1) F,S.* An intensive study of physical chemical principles including states of matter, classical thermodynamics, physical and chemical equilibria, and electrochemistry.

CH 433 Physical Chemistry II. *Preqs: CH 431, MA 301. Credit may not be claimed for both CH 433 and CH 437. 3(3-1) F,S.* An intensive study of physical chemical principles including molecular spectroscopy, statistical thermodynamics, reaction kinetics, kinetic theory, and transport properties.

CH 434 Physical Chemistry II Laboratory. *Preq: CH 431; Coreq: CH 433. 2(0-4) F,S.* A project-oriented course to acquaint students with modern physical chemistry techniques. Experiments in chemical thermodynamics, kinetics and molecular structure are carried out and analyzed.

CH 435 Introduction to Quantum Chemistry. *Preqs: MA 301; PY 208 or PY 203. 3(3-0) F.* An introduction to the basic principles of quantum theory and its application to atomic and molecular structure and spectroscopy.

CH 437 Physical Chemistry for Engineers. *Preqs: PY 208, CHE 315, MA 301. Credit may not be claimed for both CH 433 and CH 437. 4(4-0) F,S.* Selected physicochemical principles including quantum theory, statistical thermodynamics, kinetic theory, transport phenomena and rates of chemical reactions.

CH (TC) 461 Introduction to Fiber-Forming Polymers. *Preq: CH 223. 3(3-0) F.* (See textile chemistry.)

CH 490 Chemical Preparations. *Preq: Three years of CH. 3(0-9) F,S,Sum.* Library and laboratory work in preparative chemistry. Synthetic procedures will be selected to illustrate advanced methods and techniques in both inorganic and organic chemistry.

CH 491 Honors Chemistry. *Preq: Senior in Chemistry and admission to Honors Program. 1-3 F,S.* Independent study and research projects in chemistry. Honors students must register for this course in both Fall and Spring Semesters of their senior year.

CH 493 Chemical Literature. *Preq: Three years of CH. 1(1-0) F.* A systematic introduction to the location and retrieval of information required for the solution of chemical problems.

CH 495 Special Topics in Chemistry. *Preq: CI. 1-3 F,S.* To serve needs not covered by existing courses.

CH 499 Senior Research in Chemistry. *Preq: Three years CH. Credits Arranged. 1-3 F,S,Sum.* Independent investigation of a research problem under the supervision of a chemistry faculty member.

Selected 500-Level Courses Open To Advanced Undergraduates

CH 501 Advanced Inorganic Chemistry I. *Preq: CH 433. 3(3-0) F.*

CH 502 Inorganic Syntheses and Measurements. *Preq: CH 401. 2(0-6) F.*

CH 503 Advanced Inorganic Chemistry II. *Preq: CH 501. 3(3-0) S.*

CH 515 Chemical Instrumentation. *Preq: CH 431; Coreq: CH 411. 3(3-0) S.*

CH 517 Physical Methods of Elemental Trace Analysis. *Preq: CH 315 or 331 or CI. 3(3-0) F.*

CH 521 Advanced Organic Chemistry I. *Preqs: CH 223, 433 or 435. 3(3-0) F.*

CH 525 Physical Methods in Organic Chemistry. *Preqs: CH 223 and 433 or 435. 3(3-0) S.*

CH 531 Chemical Thermodynamics. *Preqs: CH 433, MA 301. 3(3-0) F.*

CH 533 Chemical Kinetics. *Preqs: CH 433, MA 301. 3(3-0) Alt. S.*

CH 535 Surface Phenomena. *Preqs: CH 433, MA 301. 3(3-0) Alt. S.*

CH 536 Chemical Spectroscopy. *Preq: CH 435. 3(3-0) Alt. S.*

CH 537 Quantum Chemistry. *Preqs: MA 301, CH 435 or PY 407. 3(3-0) S.*

CH 539 Colloid Chemistry. *Preq: CH 220, 315 or 331, or CI. 3(2-3) Alt. S.*

CH 541 Nuclear Chemistry. *Preq: PY 410 or CH 433. 3(2-3) Alt. S.*

CH (TC) 562 Physical Chemistry of High Polymers-Bulk Properties. *Preq: CH 220 or 223, CH 331 or 431. 3(3-0) F.*

CHEMICAL ENGINEERING

CHE 205 Chemical Process Principles. *Preqs: MA 201, PY 205, CH 107; Coreq: MA 202. 4(3-2) F,S,Sum.* Engineering methods of treating material balances, stoichiometry, phase equilibrium calculations, thermophysics, thermochemistry and the first law of thermodynamics. Introduction to computers and a computer language for solving problems related to the course material.

CHERN, FELDER, SETZER

CHE 225 Chemical Process Systems. *Preq: PY 208, C or better in CHE 205; Coreq: MA 301. 3(2-2) F,S,Sum.* Process measurements of importance in chemical engineering: temperature, pressure, flow rate, level, concentration. Static calibration of measuring instruments. An introduction to process dynamics and control via theory and experiment.

MARSLAND, STAHEL

CHE 311 Transport Processes I. *Preqs: MA 301, PY 208, and a grade of C or better in CHE 205. 3(3-0) F,S.* Fundamental aspects of momentum and heat transfer, and the use of these fundamentals in solving problems in transport operations.

CARBONNEL, FELDER

CHE 312 Transport Processes II. *Preq: CHE 311; Coreq: CHE 316. 3(3-0) F,S.* Fundamental aspects of mass transfer and the use of these basic principles in solving problems in transport operations.

FEDKIW, LAMB, WINSTON

CHE 315 Chemical Process Thermodynamics. *Preqs: MA 301, C or better in CHE 205. 3(3-0) F,S.* Laws of thermodynamics and their application to chemical engineering problems, both in theory and in practice. Criteria of equilibrium in physical and chemical changes. Behavior of real fluids, including mixtures.

CHERN, HALL, LIM

CHE 316 Thermodynamics of Chemical and Phase Equilibria. *Preq: CHE 315. 3(3-0) F,S.* Systematic study of chemical reaction equilibria and phase equilibrium. Use of fugacity, activity and chemical potential concepts for predicting the effect of such variables as temperature, pressure on equilibrium compositions. Methods for measuring and estimating thermodynamic properties important to equilibrium calculation in real systems.

HALL, KILPATRICK, LIM

CHE (MAT) 325 Introduction to Polymeric Materials. *Preq: CH 107, MAT 301; Coreq: MAT 324. 4(4-0) F.* Fundamental concepts in polymer science and engineering including: polymer chemistry, synthesis, physical structure, morphology, structure-property relationships, mechanical and thermal behavior, processing, and applications.

BALIK

CHE 330 Chemical Engineering Lab I. *Preq: CHE 225, CHE 311. 2(0-4) F,S.* Laboratory experiments in unit operations of heat transfer and fluid flow. Technical report writing emphasized.

SETZER

CHE 331 Chemical Engineering Lab II. *Preq: CHE 312, CHE 330. 2(0-4) S.* Laboratory experiments in mass transfer and reaction kinetics. Technical report writing emphasized.

SETZER

CHE 421 Design and Analysis of Unit Operations. *Preq: CHE 312. 3(3-0) F,S.* Procedures for sizing unit operations commonly encountered in the chemical process industries. Operating characteristics, troubleshooting techniques and economic factors in sizing and setting operating variables of these types of equipment will be discussed.

FEDKIW

CHE 425 Process System Analysis and Control. *Preq: CHE 225. 3(3-0) S.* Dynamic analysis and continuous control of chemical engineering processes. Process modeling; stability analysis, design and selection of control schemes. Solution of differential equations using Laplace transform techniques.

WINSTON

CHE 446 Design and Analysis of Chemical Reactors. *Preq: CHE 315, Coreq: CHE 316. 3(3-0) F,S.* Characterization and measurement of the rates of homogeneous and heterogeneous reactions. Design and analysis of chemical reactors.

FELDER, LIM, OLLIS, STAHEL

CHE 451 Chemical Engineering Design. *Preqs: CHE 421, CHE 446. 3(2-2) S.* Chemical process design and optimization. The interplay of economic and technical factors in process development, site selection, project design, construction and production management. Applications of cost accounting, cost estimation for new equipment, and measures of profitability.

MARSLAND, SETZER

CHE (BAE) 465 Introduction to Biomedical Engineering. *Preqs: MA 202 or MA 212, PY 208 or PY 212. 3(3-0) S.* An introduction to certain engineering concepts and to their quantitative application to biomedical problems, such as flow in the cardiovascular and respiratory systems, transfer of materials through physiological tissues and membranes, and performance of organ replacement and assist devices.

RICHARDSON

CHE 495 Seminar in Chemical Engineering. *Preq: Senior standing. 1(1-0) F,S.* Professional aspects and topics of current interest.

CHE 497 Chemical Engineering Projects I. *Preqs: Senior standing, CHE 330. 3 F,S,Sum.* Introduction to chemical engineering research through experimental, theoretical and literature studies. Oral and written presentation of reports.

CHE 498 Chemical Engineering Projects II. *Preqs: Senior standing, CHE 330. 1-3 (variable) F,S,Sum.* Projects in research, design or development in various areas of chemical engineering.

Selected 500-Level Courses Open To Advanced Undergraduates

CHE 511 Chemical Engineering Process Modeling. *Preqs: CHE 311, CHE 327, MA 301. 3(3-0) F.*

CHE 513 Thermodynamics I. *Preqs: CHE 315, 316. 3(3-0) F.*

CHE 515 Transport Phenomena. *Preqs: CHE 311, 327. 3(3-0) F.*

CHE 517 Chemical Reaction Engineering. *Preq: CHE 446. 3(3-0) S.*

CHE 521 Separation Processes. *Preq: CHE 312. 3(3-0) S.*

CHE 525 Chemical Process Control. *Preq: CHE 425. 3(3-0) S.*

CHE (OR) 527 Optimization of Engineering Processes. *Preqs: CHE 451 or OR 501, FORTRAN programming. 3(3-0) F.*

CHE 543 Technology of Polymers. *Preq: CH 223. 3(3-0) S.*

CHE 551 Biochemical Engineering. *Preqs: CHE 312, 446. 3(3-0).*

CHE 561 Biomedical Engineering I: Fluid Flow and Heat Transfer. *Preq: CHE (BAE) 465 or equivalent background. 3(3-0) F.*

CHE (TC) 569 Polymers, Surfactants and Colloidal Materials. *Preqs: CHE 316, CH 223. 3(3-0) F.*

CHE (TC) 570 Radiation Chemistry and Technology of Polymeric Systems. *Preqs: CH 221, 431. 3(3-0) S.*

CROP SCIENCE

CS 211 An Introduction to the Crop Plant. *Preq: BS 100 or BO 200. 2(4-0) F,S.* Fundamental morphological, physiological and reproductive features of crop plants are discussed. First of a sequence of two half semester minicourses which may be taken in the same semester. EMERY

CS 212 Introduction to Crop Management. *Preq: CS 211. 2(4-0) F,S.* Introduction to the management practices used for the economical production of field crops in North Carolina. Second of a sequence of two half semester minicourses which may be taken in the same semester. FIKE

CS 214 Crop Science Laboratory. *Preq. or Coreq: Any Crop Science course. 1(0-2) F,S.* Evaluates methods of identifying crop seeds and plants. Deals with the problems of buying, evaluating, treating, and producing quality crop seeds. Includes field trips to experiment stations, Crops Garden, campus laboratories, and State Seed Testing facilities. Coverage varies from semester to semester according to season of year and current production problems. EMERY, FIKE

CS 295 Special Topics in Crop Science. *Preq: CS 211, CS 212, or BO 200. 1-6 F,S,Sum.* Individual study of specific crop science principles or production practices. Also used to present topics of current interest. EMERY

CS 312 Pastures and Forage Crop. *Preqs: BS 100, SSC 200 recommended. 3(3-0) S.* Production and preservation of the principal forage crops, with attention to the establishment and maintenance of pastures.

CS 315 Turf Management. *Preq: BS 100. 3(2-2) S.* Production, utilization, and management of turf grasses. Growth responses of different plant species to natural and imposed environmental factors are assessed. Interrelationships of climate, soil, biotic factors, and plants are examined in the field, laboratory, and classroom.

CS 316 Soybean Production. *Preqs: CS 211, CS 212, SSC 200. Recommended PM 111. 3(3-0) S. Alt. yrs.* Principles of soybean management in North Carolina including variety selection, seeding, tillage, pest management, fertilization practices, harvesting, and marketing.

CS 317 Corn Production. *Preqs: CS 211, CS 212, SSC 200. Recommended PM 111. 3(3-0) F. Alt. yrs.* Principles of corn management in North Carolina and the southeastern United States. Cultivar selection, seeding, tillage, pest management, fertilization practices, harvesting and marketing of the crop.

CS 411 Environmental Aspects of Crop Production. *Preq: BO 421. 2(2-0) F.* The productivity and quality of crops in relation to all environmental factors, including man. Disorders caused by physical and biotic environmental stresses and the role of these environmental factors in normal crop development are emphasized. Utilization and manipulation of the environment for the continued improvement of crops are discussed.

PATTERSON

CS 413 Plant Breeding. *Preq: GN 411. 2(2-0) S.* Discussion of reproductive systems of higher plants; the genetic basis for plant improvement and the selection, evaluation, and utilization of crop varieties.

EMERY

CS 414 Weed Science. *Preq: CH 220. 4(3-2) F.* History, current status and fundamentals of weed biology and cultural, biological, and chemical weed control; properties and uses of herbicides; weed identification; proper use of herbicides and herbicide application equipment; and current weed management practices in crops and non-cropland situations.

WORSHAM

CS (SSC) 462 Soil-Crop Management Systems. *Preqs: CS 211, CS 212, CS 414, SSC 341, SSC 342, SSC 352, senior standing. 3(2-3) S.* (See Soil Science).

CS 490 Senior Seminar in Crop Science. *Preq: Senior in Agronomy. 1(1-0) S.* Collection, organization, written preparation, and oral delivery of scientific information in crop science and related fields.

EMERY

CS (HS) 492 Topics in Plant Breeding. *Coreq: CS 413. 1(0-2) S.* Plant breeding projects in the Department of Crop Science and Department of Horticultural Science at North Carolina State University are visited. The breeding objectives, hybridization methods, and the reproductive systems of field, fiber, forage, vegetable and/or fruit crops of North Carolina are discussed in relation to principles learned in CS 413 (Plant Breeding).

EMERY

Selected 500-Level Courses Open To Advanced Undergraduates

CS 511 Tobacco Technology. *Preq: BO 421 or equivalent. 3(3-0) S.*

CS 513 Physiological Aspects of Crop Production. *Preq: BO 421. 3(3-0) S. Alt. yrs.*

CS (HS) 514 Principles and Methods in Weed Science. *Preq: CS 414 or equivalent. 3(2-2) S.*

CS (BO, ENT, PM, PP) 525 Biological Control. *Preqs: CS 414, ENT 312 or 425, PP 315. 4(3-3) Alt. F.*

CS 591 Special Problems. *Preq: CI. Credits Arranged. F,S,Sum.*

COMPUTER SCIENCE

CSC 100 Computer Literacy. *Credit for CSC 100 is not allowed if student has prior credit in any other computer science course or computer related course. Offered only through Independent study by Extension. 2(2-0).* Survey of electronic data processing, computer hardware and software systems, and developments in information processing. Comprehensive overview of the computer: what it is, what it can and cannot do, how it operates, how it may be instructed to solve problems. Introduces both terminology and applications.

HONEYCUTT

CSC 101 Introduction to Programming. *Preq: MA 111. 3(2-2) F,S,Sum.* Understanding algorithms, programs, computer organization and characteristics of computers. Fundamental algorithms associated with computing. Data representation. Introductory programming and program structure. Debugging and verification of programs. Computer solutions of numerical and non-numerical problems using a higher-level programming language.

CSC 102 Programming Concepts. *Preq: CSC 101 (with Pascal). 3(3-0) F,S,Sum.* An introduction to modern techniques for systematic problem analysis and program design, testing, debugging, and documentation. Management of larger projects and use of more advanced algorithms than in CSC 101. Projects and algorithms from non-numeric and data-processing applications.

CSC 111 Introduction to FORTRAN Programming. *2(2-0) F,S,Sum.* An introductory FORTRAN programming course for non-majors. Emphasis is on fundamental elements of problem-solving using the computer. Particular elements include: careful systematic development of algorithms; translation of algorithms into programs written in FORTRAN; documentation of programs, debugging, and testing; facilities of modern computer systems.

CSC 200 Introduction to Computers and Their Uses. *May not be used by CSC major as a restricted elective. 3(2-2) F,S,Sum.* Computer history, hardware, systems analysis, security and legal issues. Software, including desirable characteristics of programs, the programming process, writing programs, and using a spreadsheet program.

CSC 201 Basic Computer Organization and Assembly Language. *Preq: CSC 101 or CSC 111. 3(3-0) F,S,Sum.* This course covers basic computer capabilities, basic computer organization, central processing units, main memory, address structure, data representation, error conditions, input, output and auxiliary storage devices, symbolic coding and assembly systems, subroutines, and systems software.

CSC 202 Concepts and Facilities of Operating Systems. *Preq: CSC 201 or equivalent. 3(3-0) F,S.* This course covers the history of operating systems, basic macro concepts, program management services, interrupt handling, memory addressing and allocation, input/output devices, data set characteristics and identification, data set access techniques, error handling, processing of data sets, space allocation for data sets, data set control and disposition, and the basic characteristics and use of time sharing facilities.

CSC 252 Principles of Programming—Cobol. *Preq: CSC 101. 2(2-0) F,S,Sum.* Introduction to the business-oriented programming language Cobol. Programming assignments cover general data processing, file maintenance and report generation.

CSC 254 Principles of Programming—APL. *Preq: MA 405. 1(1-0) S.* Advanced programming concepts in APL and their application to a wide variety of computing problems. The APL reference language and locally available APL hardware representations.

CSC 255 Principles of Programming—Snobol. *1(1-0) F.* Syntax and semantics of the symbol manipulation language Snobol 4. Applications of the language to programming problems in non-numeric areas.

CSC 256 Assembly Language Programming. *Preq: CSC 201. 2(2-0) S.* This course is designed to give the student an understanding of the IBM 360/370 assembly language. Topics will include: Basic programming concepts such as base register usage, looping, address modification; input-output using system macros; use of other system macros; subroutines; re-entrant coding; interrupt handling; and linking assembly language programs to higher level languages.

CSC 295 Special Topics in Computer Science. *1-3.* Special topics in CSC at the early undergraduate level.

CSC 302 Introduction to Numerical Methods. *Preqs: CSC 101 or CSC 111; Coreq: MA 202. 3(3-0) F,S.* Numerical computations with digital computers; floating point arithmetic and implications of round-off error. Algorithms and computer techniques for the numeri-

cal solution of problems in: function evaluation; zeros of functions; interpolation; numerical differentiation and integration; linear systems of equations; curve fitting; solutions of non-linear equations; numerical solutions of ordinary differential equations.

CSC 311 Data Structures. *Preq: CSC 102 and 201. 3(3-0) F,S,Sum.* Fundamental algorithms associated with data structures. Topics include the sequential and linked allocation of linear lists, stacks, queues, circular lists, arrays, orthogonal lists, strings and trees. Binary trees and their transversal, double-linked lists and multilinked structures, generalized lists, garbage collection and dynamic storage allocation are also considered. The notion of computational complexity is introduced.

CSC 312 Computer Organization and Logic. *Preqs: CSC 201, Coreq: CSC 322. 4(3-2) F,S,Sum.* Combinational logic circuits and their relation to Boolean algebra. Functional properties of combinational and sequential components and their realizations in integrated circuit forms. Organization of digital computer components; processors, control units, memories, switches, and peripherals. Architecture of computer systems. Computer arithmetic. Microprogrammed control. Interrupt mechanisms. Laboratory exercises involve logical, functional, and electrical properties of components from gates to microprocessors.

CSC (E) 321 Computer Graphics. *Preqs: MA 202 or 212 and CSC 101 or 111. 3(2-2) S.* (See Engineering, General.)

CSC (MA) 322 Discrete Mathematical Structures. *Preq: MA 202; Coreq: CSC 311. 3(3-0) F,S.* Review of sets and logic. Methods of proof, relations, functions, closure and partitions. Counting, algorithm analysis, countable and uncountable sets, cardinal numbers. Applications of some of these topics will be related to computer science.

CSC 351 Principles of Programming-LISP. *Preq: CSC 311. 1(1-0).* Programming language LISP, its "dialects," and its use in the processing of general list structures in non-numeric applications such as artificial intelligence and natural language processing. Assignments emphasize recursion and demonstrate the power and versatility of LISP.

CSC 412 Introduction to Computability, Languages and Automata. *Preq: CSC 322. 3(3-0) F,S.* An integrated development of the main results in the three areas of machines, languages, and computability. Chomsky's hierarchy of grammars and the automata that recognize the languages they generate. Major emphasis on finite-state automata and Turing machines; the problems they can solve and their limitations. Equivalence of Turing machines and recursive functions.

CSC (MA) 416 Introduction to Combinatorics. *Preqs: MA 202 and proficiency in a programming language. 3(3-0). S Alt. yrs. 2* (See Mathematics).

CSC 417 Theory of Programming Languages. *Preq: CSC 322. 3(3-0) F,S.* Theory of design and implementation of programming languages. Topics include the definition, translation, and structure of programming languages. Formal languages and automata are introduced and their applications to language definition and translation are presented. The design and implementation of language features are discussed and existing programming languages are compared.

CSC 421 Introduction to Management Information Systems. *Preq: CSC 311. 3(3-0) F,S.* Introduction to principles and techniques of information analysis and systems design as they relate to the development of management information systems (MIS). Information flow. Information requirements of management. Decision-making models. Operations analysis and modelling techniques. Organizational behavior. Systems design process. Systems analysis tools. Management games.

CSC 422 Management Information Systems. *Preq: CSC 421. 3(3-0) S.* Development of computer-based management information systems. Decision systems. Decision support systems. Interface considerations between management and the information systems. Data base concepts. Planning and programming management information systems. Cost-effectiveness and cost-benefits analysis. Management information systems project.

CSC (MA) 427 Introduction to Numerical Analysis I. *Preqs: MA 301 and programming language proficiency.* 3(3-0) F. Theory and practice of computational procedures using a digital computer, including approximation of functions by interpolating polynomials, numerical differentiation and integration, and solution of ordinary differential equations including both initial value and boundary value problems. Computer applications and techniques.

CSC (MA) 428 Introduction to Numerical Analysis II. *Preqs: MA 405 and programming language proficiency; MA (CSC) 427 is not a prerequisite.* 3(3-0) S. Computational procedures using digital computers. Solution of linear and nonlinear equation, matrices and eigenvalue calculation, curve fitting and function approximation by least squares, smoothing functions, and minimax approximations.

CSC 431 File Organization and Processing. *Preq: CSC 311.* 3(3-0) F,S. File organization and retrieval techniques. Command and query languages. Hardware characteristics of storage media. Basic file organizations including sequential, indexed sequential and direct. Searching techniques. Hashing. Inverted Files. Retrieval with primary and secondary keys. Superimposed coding. Storage structures including B-trees, AVL trees and tries. Introduction to data-base management systems.

CSC 432 Database Management Systems. *Preq: CSC 431.* 3(3-0) F. Introduction to database concepts. Data models: hierarchical, network and relational. Query languages. Query optimization. Database design. Implementation considerations. Concurrency and locking. Data integrity. Distributed databases. Database machines. Use of a commercial database system. A course project will be assigned.

CSC (ECE) 440 Digital Systems Interfacing. *Preq: ECE 318 or CSC 312.* 3(2-2) S. Concepts of microcomputer system architecture and application to fundamental computer hardware. Theory and practical experience in digital system interfacing using a variety of microprocessor peripheral chips with specific microprocessor/microcomputer systems. Practical aspects of interfacing real-world devices to a microcomputer system both from hardware and software points of view.

CSC (IE) 441 Introduction to Simulation. *Preqs: MA 202, ST 372, programming proficiency.* 3(3-0) F,S. Technique and applications of simulation for problem solving, including random number generation, input data analysis, waiting lines, variance reduction techniques, model verification and validation, and output analysis. Use of a simulation language illustrates approaches for the study of systems. Problems of interest to scientists and engineers. Programming required.

BENGSTON, T. HONEYCUTT, RICHARDS, PERROS

CSC 442 Digital Simulation. *Preq: 441; Coreq: ENG 321. This course qualifies as project course required of CSC majors.* 3(3-0) F,S. Planning digital computer simulation experiments: formulation of problem, collection and processing of real world data, formulation of model, estimation of parameters, evaluation of model, formulation of computer program. Validation, design of simulation experiments, analysis of simulated data. A term simulation project is required.

BENGSTON, HONEYCUTT, PERROS

CSC 451 Operating Systems. *Preq: CSC 202, CSC 311.* 3(3-0) F,S. Functions, structure, history and development of assemblers, macroprocessors, loaders, linkers, editors, interrupt handlers, device drivers, and other operating system components. Processor architecture, input-output devices from a software point-of-view. High level language constructs supporting concurrency in programming. Programing required.

FORNARO

CSC 452 Operating Systems Projects. *Preq: CSC 451; Coreq: ENG 321. This course qualifies as project course required of CSC majors.* 3(3-0) F,S. Definition, design, and implementation of a significant operating system project from such areas as single or multi-user file systems, process management, virtual memory, time-sharing, real-time control. Programming required.

FORNARO

CSC 461 Computer Graphics. *Preqs: MA 202 or MA 212; CSC 101 or CSC 111.* 3(3-0) F. Principles of computer graphics with emphasis on two-dimensional raster graphics. Topics include: graphics hardware and software, line and polygon drawing algorithms, transfor-

mations, segments, windowing and clipping, and interaction techniques. Core Graphics Standard followed for algorithm implementation. Programming required.

McALLISTER, ROBBINS

CSC 462 Computer Graphics Projects. *Preq: CSC 461; Coreq: MA 405. This course qualifies as project course required of CSC majors. 3(3-0) S.* Principles of computer graphics with emphasis on three-dimensional raster graphics. Topics include: transformations, projections, windowing and clipping, hidden lines and surfaces, shading, and curved surface representation. Core Graphics Standard followed for algorithm implementation. Programming required.

McALLISTER, ROBBINS

CSC 471 Programming Environments. *Preqs: CSC 202, CSC 311. 3(3-0) F.* Software systems for intensive programming. Support tools, prototyping, instrumentation, layering, subsystem organization, programmer coordination, documentation and configuration control will be illustrated on UNIX, which will be examined in detail: C language, libraries, system calls, file system, the Shell, and major utilities. Comparative survey of other contemporary environments.

FOSTEL

CSC 472 Software Engineering Project. *Preq: CSC 471. Coreq: ENG 321. Audits not allowed. 3(3-0) S.* Development of a complex application subsystem following software engineering methods: requirements analysis, design, documentation quality assurance, configuration control, work and time management. Introduce distinction of development and target environments. Term project required. Additional topics dependent upon application.

FOSTEL

CSC 481 Software Engineering with Ada. *Preq: CSC 311. 3(3-0) F,S.* Theory and practice in the high order language Ada, with emphasis on software engineering issues addressed by the language. Language applications and techniques.

CSC 495 Special Topics in Computer Science. *Preq: CI. 1-6 F,S,Sum.* Used for the following types of study: readings in the literature of computer science, introductory research projects, major computer programming projects, seminars, or new course development. Work may be done in any CSC area such as software, hardware utilization, programming languages, numerical methods or telecommunications.

CSC 499 Independent Research in Computer Science. *Preq: Consent of Department. 1-6 F,S,Sum.* Independent investigation of a research problem under faculty supervision.

Selected 500-Level Courses Open To Advanced Undergraduates

CSC (CSE, ECE) 501 Design of Systems Programs. *Preqs: CSE 452 and CSE 453. 3(3-0) F,S.*

CSC (CSE, ECE) 506 Digital Systems Architecture. *Preq: ECE 340 or CSC 312 or CSE 454. 3(3-0) F,S.*

CSC (CSE, ECE) 510 Software Engineering. *Preqs: CSC 311 and CSC 322 or CSE 453 and CSE 455 or equivalent. 3(3-0) F.*

CSC (CSE, ECE) 512 Compiler Construction. *Preq: CSC 311 or CSE 453. 3(3-0) S.*

CSC 541 Advanced Data Structures. *Preq: CSC 311 or CSE 453. 3(3-0) F.*

CSC (CSE, ECE) 542 Database Management. *Preq: CSC 431 or CSE (CSC, ECE) 501. 3(3-0) F.*

CSC (CSE, ECE) 571 Data Transmission/Communications. *Preqs: CSE 454 or CSC 312 or ECE 340; CSE 459 or ECE 301. 3(3-0) S.*

CSC (CSE, ECE) 572 Computer Communications. *Preq: CSC 312 or ECE 340 or CSE 454; Coreq: B average in technical subjects. 3(3-0) F.*

CSC (CSE, ECE) 573 Introduction to Computer Performance Modelling. *Preqs: CSE 454, MA 421; Coreq: CSE 501. 3(3-0) F.*

CSC (CSE, ECE) 574 Real Time Computer Systems. *Preq: CSC 405 or CSE (CSC, ECE) 501. 3(3-0) Alt. S.*

CSC (MA) 582 Numerical Linear Analysis. *Preqs: MA 405 or equivalent and a knowledge of computer programming. 3(3-0) F.*

CSC (MA) 583 Numerical Solution of Ordinary Differential Equations. *Preq: Knowledge to the level of CSC 427. 3(3-0) S.*

CSC (MA) 584 Numerical Solution of Partial Differential Equations—Finite Difference Methods. *Preq: Knowledge to the level of CSC 427-428. 3(3-0) F,S.*

CSC (MA, OR) 585 Graph Theory. *Preq: MA 405. 3(3-0) F.*

CSC 595 Special Topics. *Preq: CI. 1-6 F,S.*

COMPUTER STUDIES

CSE 457, CSE 458, and CSE 459 are fast paced one-credit courses that are abbreviated from regular 3-credit undergraduate courses on this campus. They are structured primarily for students with a bachelor's degree in one of the quantitative sciences, but with little computer engineering background.

CSE 457 Electric Circuits. *Preqs: MA 202, PY 208, B average in mathematics and physics. No degree credit for electrical engineering or computer studies majors or anyone having received credit for EE 201, 202, 331, 332. 1(3-0) F.* Circuit parameters, laws and theorems, transient analysis, and transformer principles. The course will meet three hours each week for the first five weeks of the semester.

CSE 458 Electronic Circuits. *Preq: CSE 457. No degree credit for electrical engineering or computer studies majors or anyone having received credit for EE 314. 1(3-0) F.* Diodes, transistors, circuit models, operational amplifiers, frequency response, latches, data conversion. This course will meet three hours each week for the middle third of the semester.

CSE 459 Linear Systems. *Preqs: CSE 458, B average in physics. No degree credit for electrical engineering or computer studies majors or anyone having received credit for EE 301. 1(3-0) F.* Signals, transfer functions and time response, stability. This course will meet three hours each week for the final five weeks of the semester.

Selected 500-Level Courses Open To Advanced Undergraduates

CSE 501 Design of Systems Programs. *Preqs: CSE 452 and CSE 453. 3(3-0) F,S.*

CSE 502 Computational Linguistics. *Preq: CI. 3(3-0) F.*

CSE 505 Design and Analysis of Algorithms. *Preq: CSC 311 or CSE 453. 3(3-0) F,S.*

CSE (CSE, ECE) 506 Digital Systems Architecture. *Preq: ECE 340 or CSC 312 or CSE 454. 3(3-0) F,S.*

CSE (CSC, ECE) 510 Software Engineering. *Preqs: CSC 311 and CSC 322 or CSE 453 and CSE 455 or equivalent. 3(3-0) F.*

CSE 511 Artificial Intelligence I. *Preq: CSC 311 and either CSC 322 or PHI 201 or background in symbolic logic. 3(3-0) F.*

CSE (CSC, ECE) 512 Compiler Construction. *Preq: CSC 311 or CSE 453. 3(3-0) S.*

CSE (ECE) 513 Digital Signal Processing. *Preqs: ECE 401, B average in ECE and MA or CI. 3(3-0) F.*

CSE (ECE) 514 Random Processes. *Preqs: ECE 301, B average in ECE and MA. 3(3-0) F.*

CSE (ECE) 520 Fundamentals of Logic Systems. *Preqs: ECE 318, B average in ECE and MA. 3(3-0) F.*

CSE 522 Formal Languages and Syntactic Analysis. *Preq: CSE 412 (CSE 512 recommended). 3(3-0) F.*

CSE (ECE) 533 Digital Electronics. *Preqs: ECE 314, grad. standing or B average in ECE or MA. 3(3-0) S.*

CSE (MA) 536 Theory of Sequential Machines. *Preq: CSC 412 or grad. standing. 3(3-0) F.*

CSE (MA) 537 Theory of Computability. *Preq: CSC 412 or grad. standing. 3(3-0) S.*

CSE 542 Database Management. *Preq: CSC 431 or CSE (CSC, ECE) 501. 3(3-0) F.*

CSE (ECE) 558 Digital Image Processing. *Preqs: ECE 401, ST 371, high-level programming capability. 3(3-0) Every yr.*

CSE (CSC, ECE, OR, IE) 562 Computer Simulation Techniques. *Preqs: ST 516 and a scientific programming language. 3(3-0) F.*

CSE (CSC, ECE) 571 Data Transmission/Communications. *Preqs: CSE 454 or CSC 312 or ECE 340; CSE 459 or ECE 301. 3(3-0) S.*

CSE (CSC, ECE) 572 Computer Communications. *Preq: CSC 312 or ECE 340 or CSE 454; Coreq: B average in technical subjects. 3(3-0) F.*

CSE (CSC, ECE) 573 Introduction to Computer Performance Modelling. *Preqs: CSE 454, MA 421; Coreq: CSE 501. 3(3-0) F.*

CSE (CSC, ECE) 574 Real Time Computer Systems. *Preq: CSC 405 or CSE (CSC, ECE) 501. 3(3-0) Alt. S.*

CSE 591 Special Topics in Computer Studies. *Preqs: B average in technical subjects and CI. 3(3-0) F, S.*

DESIGN FUNDAMENTALS

(Also see DN—Design.)

DF 101, 102 Environmental Design I, II. *Preq: (DF 102) DF 101. Available to School of Design students only; this restriction may be waived by Dean and Department Head. 6(0-9) F, S.* Introduction to the design disciplines and programs of the School of Design. A studio course examining the techniques and attitudes for dealing with identification, solution and evaluation arising from the design of physical artifacts in the natural and man-made environment. The acquisition of languages and skills appropriate to these studies.

DF 111 Two Dimensional Design for Non-Design Majors. *This course is not open to School of Design students. 3(0-6) F, S.* An introduction to the fundamentals of design studies through two dimensional problems. The basic elements and concepts of design will be explored as abstract and applied problems through design issues. It is the goal of this course to provide non-design students an introduction to design principles and a language of design.

DF 112 Three Dimensional Design for Non-Design Majors. *This course is not open to School of Design students. 3(0-6) F, S.* An introduction to the fundamentals of design studies through three dimensional problems. The basic elements and concepts of design will be explored as abstract and applied problems through the design issue. It is the goal of this course to provide non-design students a working knowledge of design principles and a language of design.

DF 400 Advanced Design Studio. *Preq: DF 102. Open only to School of Design students—Restriction waived at discretion of Dean and Department Head. 6(0-9) F, S.* Studio offering upper level undergraduates the opportunity to intensively study fundamental design issues (form, color, structure, proportion, scale, etc.) in a studio mode. Course may be used to partially satisfy studio requirement in all undergraduate programs in the School of Design.

DESIGN

(Also see ARC—Architecture, DF—Design Fundamentals, LAR—Landscape Architecture, PD—Product Design, and VD—Visual Design.)

DN 141 History of Design I. *Open to University students on a space available basis. 3(3-0) F.* A critical study of the related design fields from prehistoric to early Christian times with reference to the social, political and technological movements which affected their development. REUER

DN 142 History of Design II. *Open to University students on a space-available basis. 3(3-0) S.* A critical study of the related design fields from early Christian to modern times with reference to the social, political and technological movements which affected their development. REUER

DN 165 Microcomputers for Designers. *School of Design majors only. 3(3-0) F,S.* Microcomputers and introductory programming with specific applications to design. TECTOR

DN 212 Basic Photography. *Preq: DF 102. 3(2-2) F,S.* Introduction to photographic processes and skills.

DN 217 Typography I. *Preq: DF 102. 3(2-2) F.* Preliminary investigation into the uses of typography as a communications medium. Problems based on single sheet solutions, using both single and composite imagery and including such projects as posters, announcements, advertisements, and covers; type specification; and copyfitting.

DN 221 Introduction to Environment and Behavior for Designers. *Credit in both DN 221/231 and DN 232 is not allowed. Students must concurrently enroll in DN 221 and 231. 3(3-0) F.* An introductory integration of behavioral and environmental information, emphasizing a basic understanding of human behavior, natural systems, and their relation to environmental design. Examined is the impact of people and their artifacts on natural systems, and the impact of natural systems on people and their artifacts. Humane, ecologically sound utilization of these relations is explored. WOOD

DN 222 Human Perception and Behavior for Designers. *3(3-0) S.* Course examines the linkages among perception, cognition and behavior with a strong emphasis on the perceptual mechanisms of humans, especially the eyes and ears. Also deals with the cognitive organization of perceptual information, its relation to language, society and culture and isolated human behavior at the micro and macro levels. WOOD

DN 231 Introduction to Environment and Behavior for Designers. (See DN 221.) WOOD

DN 232 Introduction to Natural Systems and the Built Environment. *Credit in both DN 221/231 and DN 232 is not allowed. 3(3-0) F,S.* This course is an introduction to natural systems and their integration into environmental design processes. Historical and present relationships between people and the physical environment are examined. Natural systems are analyzed as a foundation for environmental design decisions and ecologically sound habitation systems are explored.

DN 234 Introduction to Environmental Design. *Not available for credit to design students except as free elective. 3(2-4) S.* An introduction to small-scale environmental design. Emphasis on drawing and modeling as ways of seeing and thinking about the environment and its development. Special attention is paid to the role of environmental factors (sun, water, soils, vegetation) in problem identification and solution.

DN 242 History of Graphic Design. *3(3-0) S.* Events, ideas, movements, designs and individuals that have historical significance and influence on contemporary graphic design and the graphic design profession. Concentration on graphic design of the last 100 years. LANGE

DN 251 Principles of Architectural Structures. *3(2-2) F,S.* Development of the principles of structural behavior. A survey of structural systems, both natural and man-made, with an emphasis on a qualitative examination of the forces, influences or purposes to which they respond.

DN 252 Environmental Responses in Design. 3(3-0) S. An introductory study in form seen as a response between man and the natural environment. The morphological relationship between material properties and environmental energies and their dual impact on the shape of the built artifact is investigated.

DN 253 Basic Environmental Systems. 3(2-2) F,S. Natural and man-made laws as applied to buildings and their various applications to lighting, heating, cooling, ventilation, plumbing, vertical transportation and sound.

DN 254 Architectural Materials. 3(2-2) F,S. Building materials as they relate to design. Materials in terms of their design potentials, their physical properties, origins, chief uses in construction, and performance in relation to other materials. Factors of environment, use, workmanship and economics upon which decisions about building materials are made.

RAND

DN 255 Contemporary Manufacturing Processes I. 3(3-0) F. Introduction to mass production processes and their influences on design. Emphasis is placed on material search and process selection in relation to form, function, human factors, finishes and joining methods. An analysis of paper, wood and metal manufacturing processes utilized in the production of mass-produced products.

COOKE

DN 256 Contemporary Manufacturing Processes II. 3(3-0) S. Introduction to mass production processes and their influences on design. Emphasis is placed on material search and process selection in relation to form, function, human factors, finishes and joining methods. An analysis of plastics and rubber and their specific manufacturing processes utilized in the production of mass-produced products.

COOKE

DN 257 Landscape Materials and Construction I. 3(2-4) F. An option for those students wishing to concentrate on the use of materials in small scale physical design. The course will concentrate on the properties of materials in design and construction techniques. Exercises in design will stress the implementation and use of materials for particular situations.

DN 258 Landscape Materials and Construction II. 3(2-4) S. A continuation of DN 257 with an emphasis on material use and construction techniques; the development of construction documents; project organization and control and professional office organization will also be covered.

DN 261 Design Methods. 3(3-0) F. Description, comparisons, and testing of methods available in design with emphasis on problem-solving techniques.

TECTOR

DN 292 Special Topics in Design *Preq: Consent of Instructor.* 1-3. F,S. Topics of current interest in the School of Design.

DN 311 Basic Visual Laboratories. *Preq: Design Majors: DF 102; Non-Design Majors: DF 111, 112.* 3(0-6) F,S. Continuation on a basic level of the activities encountered in Design Fundamentals that relate to the major design areas in the School of Design. Activities involve study of visual communication skills in areas of sculpture, life drawing, printmaking, painting. The student elects instructor and area(s) of activity.

DN 312 Intermediate Photography. *Preq: DN 212.* 3(2-2) F,S. Continuation on an advanced level of the skills and techniques developed in Basic Photography. Purpose is to develop use of camera as a perceptual tool to increase awareness and sensitivity of visual imagery.

DN 316 Film Animation. *Preqs: DF 102; or DF 111 and 112.* 3(3-0) Alt. yrs. S. A course in experimental film animation with emphasis on the integration of drawing, sculpture, 3-dimensional model building and film making.

TOPLIKAR

DN 317 Typography II. *Preq: DN 217.* 3(1-4) S. Continuation on an advanced level of the activities encountered in Typography I. Designed to allow the student to make an in-depth study of communication via typographic means.

DN 318 Ideation I. *Preq: DF 102.* 3(2-2) F. Introduction to the ideation process of conceiving, developing and recording ideas two dimensionally. These techniques are defined and practiced as an extension of understanding the human ideamotor process.

DN 349 Historic Architecture Research. *Preq: DN 141/142. 3 F,S.* Research and the recording of sites, monuments, buildings or artifacts of historical interest.

DN 351 Architectural Structures I. *Preq: or Coreq: DN 251. 3(2-2) F.* An introduction to force systems, quantitative treatment of equilibrium conditions; analysis of forces in trusses, frames and beams; behavior of materials: stress-strain diagrams, ductility, brittleness, creep; mechanics of areas; column behavior; stresses and deflection in beams.

DN 352 Architectural Structures II. *Preq: DN 351. 3(2-2) S.* Selection of structural system and design of structural elements in wood, steel, concrete and aluminum.

DN 353 Building Design with Natural Energy. *3(2-3) F,S.* Fundamentals of building design using natural energies including sun and shade, radiation and evaporation, air movement and diurnal temperature cycles, combined with an opportunity for application to building design.

DN 354 Building Workshop. *Preq: DF 102. 3(2-2) S.* Gives the student the opportunity to concentrate on the process and logic of building one's own design. The workshop brings together structural behavior, geometry, and materials in the construction of physical form at a large scale. The experience of execution offers the opportunity for evaluative testing with the critical support of a faculty member.

TAYLOR

DN 411 Advanced Visual Laboratory. *Preq: DF 102. Sophomore standing, may be taken for a maximum of 12 credit hours. 2-4 S.* Continuation, on an advanced level, of the activities encountered in Design Fundamentals that relate to the major design areas in the School of Design. Activities involve study of visual communication skills in areas of sculpture, life drawing, printmaking, painting, photography. The student elects instructor and area(s) of activity.

DN 412 Advanced Photography. *Preq: DN 312. 3(2-2) S.* Use of the camera as a communicative vehicle for the expression of ideas and information and as an alternative form. The study and manifestation of visual imagery.

DN 413 Synthetic Drawing. *Preq: DF 102. 3(2-3) F.* Introduction to the various modes of synthetic drawing, including coordinating systems, perspectives, time sequence diagrams, orthographic and axonometric projections and functional diagrams.

DN 414 Color and Light. *Preq: DF 102. 3(3-0) F,S.* The physical and perceptual nature of color. Color awareness, sensitivity and skills in visual communication with pause color as a designer's tool.

PAUSE

DN 415 Microcomputer Graphics for Designers. *Preq: DN 165. 3(3-0) S.* Theory and development of computer graphic algorithms for microcomputers and applications to the geometries of design.

TECTOR

DN 418 Ideation II. *Preq: DN 318. 3(2-2) S.* This is an advanced course which expands the Ideation process with greater emphasis directed toward the creative development and recording-of-ideas phases.

DN 419 Multi-Media in Design. *Preq: DN 212. 3(1-4) S.* Investigation of audio-visual communication in design. Emphasis on individual projects, 8mm and 16mm cinephotography and film animation, multiple projector programming and sound, video-tape equipment. Exploration into the creation of sensory environments.

DN 421 Environmental Cognition for Designers. *Preq: DN 221/231 or DN 222. 3(3-0) F.* A basic model of cognitive processes is examined, providing a framework for a lengthy exploration of cognitive imagery. This commences with body imagery and images of self, moving from there to developmental images of home, school, neighborhood and city. Mature imagery of similar things is studied, concluding with a model of the micro-genetic development of environmental imagery useful in design decision-making.

WOOD

DN 423 Spatial Cognition for Designers. *Preq: DN 221/231 or DN 222. 3(3-0) F.* The history of the concept of space in the Western world is examined as a foundation from which to look at how humans cognize space. A child developmental perspective is emphasized, but a model of spatial cognition in the adult is described. The relation of spatial to environmental cognition is treated.

WOOD

DN 430 Site Planning. *Preq: DN 221/231 and MEA 120/110 or MEA 101/110 or SSC 205. 3(2-2) F, S.* Introduction into the technical operations and environmental landscape controls on project scale developments. The course covers site analysis, road alignment, grading, hydrologic control, sedimentation control and related problems of land development.

DN 432 Environmental Assessment and Design Field Workshop. *Preq: DN 221/231 or DN 232. 3 Sum.* This summer field workshop is a hands-on experience concerned with the assessment of natural systems and their utilization in the active manipulation of the environmental setting. Experiments relating to alternative decentralized energy systems, energy conservation methods, and low-technology, ecologically sound site support systems will be designed and executed.

DN 433 Native Plants in Environmental Design. *Preq: DN 221/231 or DN 232, HS 211. 3(2-2) S.* Analysis will be made of natural processes relating to native North Carolina plant materials. Planting design theory and planting design methods will be applied in a laboratory situation.

DN 441 History of Contemporary Architecture. *Preq: Junior standing or DN 141 or DN 142. 3(3-0) F.* A survey and critical examination of modern architecture from its origins in 19th century philosophy and technology to the most recent developments in world architecture.
CLARK

DN 443 Landscape History: From the Ice Age to the Present. *Preq: DN 141, 142. 3(3-0) F.* The landscape designer deals with a landscape that has been shaped by man for the past fifteen or so thousand years. What has been the nature of man's agency? How extensive have been the changes man has wrought? Course examines in depth the landscape impacts of agriculture, commerce and industry attempting to establish the context within which the landscape designer operates.
WOOD

DN 444 History of Landscape Architecture. *Preq: DN 141, 142. 3(3-0) F.* The history of man's deliberate and conscious attempts to design the landscape is examined, beginning with a view of the efforts and results of primitive man. Ancient, medieval and Renaissance work is examined in garden and urban design to set the stage for the explosion of professional activity that followed. The work of Frederick Law Olmsted is examined in detail.
WOOD

DN 445 Aesthetics and Design. *Preq: DN 141 or DN 142. 3(3-0) F.* An examination of the identity, nature, and function of aesthetic experience, cognition, and action as related to the design disciplines and reflected in designed artifacts.
TESAR

DN 447 Ideas in American Architecture I: 1865-1893. *Preq: Junior standing. 3(3-0) F Alt. yrs.* American architecture as a physical manifestation of social, economic, and ideological patterns from the end of the Civil War to the World's Columbian Exposition. Draws on literature, art, and philosophy of the period as a setting for buildings and as a background for design theory.
WEINEL

DN 448 Ideas in American Architecture II: 1893-1918. *Preq: Junior standing. 3(3-0) S. Alt. yrs.* American architecture as a physical manifestation of the social, economic and ideological patterns from the World's Columbian Exposition to the First World War. Draws on literature, art, and philosophy of the period as a setting for buildings and as a background for design theory.
WEINEL

DN 449 Urban Form and Structure. *Preq: Junior standing. 3(3-0) F.* An analysis of the principles and theories of physical urbanism ranging from the historic city to the modern metropolis, with an emphasis on the evolutionary processes of the contemporary city.
BATCHELOR

DN 451 Illumination. *Preq: DN 253. 3(1-4) S.* Design of illumination systems for interior space. Model simulation of alternative lighting schemes.
BARNES

DN 452 Climate Control Systems and Design. *Preq: DN 253. 3(1-4) F.* Mechanical and non-mechanical systems for heating, cooling, ventilating interior of building with emphasis on energy conscious design.
BARNES

DN 453 The Systems Approach to Building. *Preq: DN 254. 3(3-0) S.* An examination of a totally integrated process of programming, designing, constructing and evaluating buildings or larger environmental units. The history of industrialized building and case studies of significant systems building efforts of recent years will be investigated. Included will be an assessment of the future potentials of the systems approach and the designer's role.

DN 454 Geometry for Designers. *Preq: DF 102. 3(3-0) F.* An opportunity to explore and examine geometry and geometrization as applied to the various fields of physical design. Limited mathematical and drawing skills needed. TAYLOR

DN 455 Visual Design Materials and Processes I. *Preq: DF 102. 3(2-2) F.* Introduction to basic tools and materials of visual design, packaging, typography and layout. The course will acquaint the student with mass production of two and three-dimensional visual designs, packages and display techniques.

DN 456 Visual Design Materials and Processes II. *Preq: DF 102. 3(2-2) S.* Introduction to basic tools and materials of visual design, packaging, typography and layout. The course will acquaint the student with mass production of two and three-dimensional visual designs, packages and display techniques.

DN 457 Architectural Construction Systems. *Preq: DN 254. 3(2-3) S.* Building construction systems related to architectural design. Historical and current building practices. Implications for design and systems selection. Case studies. Field trips are required. RAND

DN 462 Predictive Techniques, Predesign Methods, and Programming. *Preq: DN 261. 3(3-0) S.* Problem solving, research methods, programming, games, graph theory and their applications to design. TECTOR

DN 491 Special Seminar in Design. *1-3 F,S.* Seminars on subjects of current interest in design which are presented by persons not part of the regular faculty.

DN 492 Special Topics in Design. *1-3 F,S.* Topics of current interest to the programs in the School of Design offered by faculty in the School. Courses offered under this number are normally used to develop new courses.

DN 493 Mini-Course in Design. *2-3 F,S.* Seminars, workshops and lectures which by nature of their subject matter, focus or method of instruction do not fit the semester model.

DN 494 Internship in Design. *Preq: Junior standing. Approval of program director. Max. 6 cr. hrs. 3-6 F,S.* Supervised field experience in professional offices and organizations whose activities are related to the programs of the School of Design.

DN 495 Independent Study in Design. *Preq: Junior standing. Max. 6 cr. hrs. Approval of program director and core chairman. 1-3 F,S.* Special problems in various aspects of design developed under the direction of a faculty member on a tutorial basis.

Selected 500-Level Courses Open To Advanced Undergraduates

DN 541 Seminar on Ideas in Design. *Preq: Grad. standing. 2-3 F,S.*

ENGINEERING

E 100A Introduction to Engineering I. *0(1-0) F.* Orientation to the University and introduction to the School of Engineering and the engineering profession. General academic requirements and special educational opportunities, the history of engineering, professionalism and ethics.

E 100B Introduction to Engineering II. *1(1-0) S.* Overview of mechanical, electrical, and energy systems in engineering, and the importance of materials specification in engineering design. Exposure to the engineering curricula available to students at NCSU.

E 432 Patents, Trademarks and Copyrights. *Preq: Jr. standing. 3(3-0) S.* Patent, trademark and copyright problems that arise in engineering, scientific and industrial pursuits. Includes the rights and remedies available to individual inventors and authors as well as companies. Patent Office procedures and practices. **MILLS**

Selected 500-Level Courses Open To Advanced Undergraduates

E (MA, OR) 531 Dynamical Systems and Multivariable Control. *Preqs: MA 301, 405 or equivalent. 3(3-0) F.*

ECONOMICS AND BUSINESS

(Also see ACC—Accounting.)

EB 201 Economics I. *Credit will not be awarded for both EB 201 and EB 212. Students interested in agriculture and natural resources should enroll in EB 212 instead of this course. 3(3-0) F,S,Sum.* Introduction to microeconomics. Basic tools of economic analysis for understanding how prices are determined in resource and product markets and how the price system is modified by private and public action. **WESSELS**

EB 202 Economics II. *Preq: EB 201 or EB 212. 3(3-0) F,S,Sum.* Introduction to macroeconomics centering on the aggregate level of economic activity. Emphasis on the determination and measurement of national income, international economics, unemployment, inflation and money and how these are influenced by governmental monetary and fiscal policies. **WESSELS**

EB 212 Economics of Agriculture. *Preq: MA 111. Credit will not be awarded for both EB 201 and EB 212. 3(3-0) F,S.* Introduction to the functioning of the agricultural economy including the allocation of resources in agricultural production and consumption, relationships between agriculture and other segments of the economy, and current problems within the agricultural sector. **PASOUR, PEELER**

EB 230 Economics of Cooperatives. *2(2-0) F.* Topics include the evolution of cooperative principles and growth of agricultural and consumer cooperative businesses; legislative foundations and legal status of cooperatives; organization, management and financial decisions that are unique to cooperative business enterprises; and a discussion of current public policy issues relating to cooperatives. **KING**

EB 301 Intermediate Microeconomics. *Preqs: MA 113 or 112; EB 201 or 212. Credit not allowed for both EB 301 and 401. 3(3-0) F,S,Sum.* Functioning of the market economy: role of prices in determining the allocation of resources; the functioning of the firm in the economy; forces governing the production of economic goods.

EB 302 Intermediate Macroeconomics. *Preqs: EB 201 or EB 212; MA 113 or MA 112. 3(3-0) F,S,Sum.* Relates the economic behavior of households, business firms, the central bank, and government to the determination of the levels of national income, employment, inflation, and growth in production capacity. Problems of public policy-making in the pursuit of macroeconomic goals such as high employment, price stability, and adequate growth in the economy's production capacity.

EB 303 Farm Management. *Preq: EB 212 or 201. 3(2-2) F,S.* Analytical and planning techniques applicable to farm business decisions. Economic principles and management concepts such as budgeting, linear programming, accounting and financial management as related to practical problems of organizing and operating a farm business. **TOUSSAINT**

EB 306 Agricultural Law. *Preq: EB 201 or EB 212. Credit for both EB 306 and EB 307 is not allowed. 3(3-0) F,S.* Legal principles of practical importance in an agricultural setting: the court system; tort, contract and real and personal property law; legal aspects of organizing an agribusiness; environmental and labor regulations affecting agriculture; income and estate taxation of agriculture. **ALLEN**

EB 307 Business Law I. *Preq: EB 201 or 212. Credit for both EB 306 and EB 307 is not allowed. (3-0) F,S.* The main principles of law affecting the conduct of trade. Main areas of interest: criminal law, tort law, contracts, agency, real and personal property, wills, and estates.

EB 308 Business Law II. *Preq: EB 307. 3(3-0) F,S.* The main principles of law affecting the conduct of trades and industry, including corporations, partnerships, insurance, government regulation of business, sales, negotiable instruments, and selected transactions.
ALLEN, CARRAWAY, HUGGARD

EB 311 Agricultural Markets. *Preq: EB 212 or 201. 3(3-0) F,S.* The agricultural marketing system and the current economic forces affecting its structure and efficiency, decision-making by agricultural business firms including integration and interfirm relationships; effects of monopoly in marketing relative to government policies of control. Emphasis on managerial decisions including an examination of the role of futures markets and their use by firms in the agricultural marketing system.
DAHLE, PEELER

EB 313 Marketing Methods. *Preq: EB 201 or 212. 3(3-0) F,S.* Examination of decisions affecting marketing of goods and services in consumer, industrial and international markets. Emphasis on the role of marketing in a managerial context. Areas studied include: the activities of marketing research, identification of marketing opportunities, and the development of marketing mix strategies including the decisions concerning pricing, distribution, promotion and product design.
COURCHANE, GERSTNER, LIEBOWITZ

EB 325 Managerial Economics. *Preq: EB 201 or 212. 3(3-0) F,S.* Economic principles applied to decision-making in the firm. The relationship between accounting and economic concepts of cost. Pricing for sales within and outside the firm. The consequences for the firm of the competitive economy. The meaning of risk. Decision-making under uncertainty. The implications of transactions costs for the organization of firms
MARGOLIS, NEWMARK

EB 326 Human Resource Management. *Preq: EB 201 or 212. 3(3-0) F,S.* Issues faced by firms in attracting and maintaining a productive work force. Criteria for decisions by the profit-maximizing firm in determining wages, fringe benefits and working conditions. Job safety, on-the-job training, the behavior of unions, and government regulation in the labor market.
ALLEN, CLARK, FEARN, WESSELS

EB 332 Industrial Relations. *Preq: EB 201 or 212. 3(3-0) F,S.* The role of collective bargaining in the labor market. Determinants of the pattern of union membership today and its growth rate. The objectives and tactics of both labor and management within public policy guidelines. Analysis of the impact of unions on job security, productivity, and compensation.
ALLEN, FEARN

EB (ST) 350 Economics and Business Statistics. *Preqs: MA 114; EB 201 or 212. 3(3-0) F,S.* Introduction to statistics applied to economic and business problems. Emphasis on statistical estimation, inference, linear and multiple regression, and analysis of variance.
WILSON

EB (HI) 370 The Rise of Industrialism. *Preq: EB 201 or 212. 3(3-0) F,S.* The pattern of historical development of modern industrial economy. Capitalism's origins in 16th century England are related to succeeding developments in the overseas colonial empire and in other areas influenced by those developments.
D. FISHER, SYLLA

EB (HI) 371 Evolution of the American Economy. *Preq: EB 201 or 212. 3(3-0) F,S.* Advances of modern economic development are related to the history of America. Contemporary problems and issues are analyzed with reference to their origins in the historical growth of the economy.
BALL, SYLLA

EB 401 Economic Analysis for Nonmajors. *Preq: EB 201 or 212. Not open to undergraduates majoring in the Department of Economics and Business. Credit not allowed for both EB 301 and 401. 3(3-0) F,S.* Intermediate economic theory of firm, household, and market behavior primarily for graduate students desiring an economics minor at the master's level. Students who have taken intermediate microeconomics and calculus elect

EB 501 instead. Topics include demand, production and cost theory, market equilibrium under competitive and non-competitive conditions, an introduction to general equilibrium theory, externalities and problems of economic efficiency.

GRENNES, HYMAN, KNOEBER, WALDEN

EB 403 Economics of Consumer Decisions. *Preq: EB 201 or EB 212. Not open to undergraduates majoring in the Department of Economics and Business. 3(3-0) Alt. Sum.* The application of microeconomic and macroeconomic concepts to practical consumer decisions: home ownership and housing finance, credit, insurance, investments, retirement planning, energy considerations and information collection. Relationship of macroeconomic policy decisions to individual consumer decisions.

WALDEN

EB 404 Money, Financial Markets, and the Economy. *Preq: EB 302. 3(3-0) F,S.* An in-depth probe of the roles of money, credit, and financial institutions in a market economy. The allocation of credit, the determination of interest rates and security prices, and the activities of the Federal Reserve System are treated.

FISHER, LAPP, PEARCE, POINDEXTER

EB 405 Regulatory Law. *Preq: EB 301. 3(3-0) F,S.* The major statutes regulating business with some policy discussion of the economic costs and benefits of current regulations and proposals for reform. A general introduction to the judicial system, environmental law, securities law, employment law, and product safety.

BAUMER, HUGGARD

EB 410 Public Finance. *Preq: EB 301. 3(3-0) F,S.* A micro-economic analysis of the rationale for public expenditure and taxation. Externalities, pollution and public policy, income redistribution and public welfare, public goods, collective choice and political institutions, public budgeting techniques and cost-benefit analysis, taxation and tax policy, state-local finance and fiscal federalism.

HYMAN, KNOEBER

EB 413 Competition, Monopoly and Public Policy. *Preq: EB 301. 3(3-0) S.* Current theories of industrial organization with specific reference to such topics as cartels, industrial concentration, vertical integration, franchise contracts, ownership and control of firms, multipart and discriminatory pricing, and tie-in sales. Economic aspects of antitrust law and government regulation of industry.

BAUMER, FLATH, NEWMARK

EB 415 Farm Appraisal and Finance. *Preq: EB 303. 3(2-2) F.* The earnings, market and cost approaches to real estate valuation with practice in the application of current appraisal procedures to rural property. Criteria and techniques for the financial management of a farm. Covers existing sources and terms of capital, forms of business organization and methods of credit analysis.

COLLENDER

EB 420 Corporation Finance. *Preqs: EB 201 or 212, and ACC 260 or 265. 3(3-0) F,S.* The principal areas of managerial finance, including the techniques necessary to make decisions. Emphasis on the investment, financing, and dividend decisions that all business firms must make. Discussion of the basis for analytically evaluating other topics, such as mergers and portfolio considerations for a firm.

ERICKSON, M. FISHER, JONES, KUPIEC, MITCHELL

EB 422 Investments and Portfolio Management. *Preqs: EB (ST) 350 or ST 311, and EB 420. 3(3-0) F,S.* Analysis of the investment process, dichotomized into security analysis and portfolio management. Background information on financial assets, securities markets, and risk-return concepts. Analysis of valuation theory and techniques, modern portfolio theory and portfolio performance.

M. FISHER, JONES

EB 425 Quantitative Methods for Management. *Preqs: EB 201 or 212, and EB (ST) 350. 3(3-0) F,S,Sum.* Formulation and use of quantitative models in solving management problems. Linear programming, decision theory, and forecasting. Case studies of actual business problems; use of computer software packages.

NEWMARK

EB 430 Agricultural Price Analysis. *Preq: EB 301. 3(3-0) S.* Factors influencing agricultural prices and their effects on producers and consumers; analysis of the interrelationship of cash, futures, and option market prices of agricultural commodities and alternative ways in which governmental action affects agricultural prices; development of models for price analysis and forecasting construction of price indices, and calculation of parity price.

SCHRIMPER

EB 431 Labor Economics. *Preq: EB 301. 3(3-0) F,S.* An economic approach to the labor market and its problems including unemployment and the determination of wages, hours and working conditions under various labor market structures. The economic effects of trade unions. Introduction to human capital theory.

ALLEN, CLARK, FEARN, WESSELS

EB 433 U.S. Agricultural Policy. *Preq: EB 301 or EB 401. 3(3-0) S.* Government economic policies and programs affecting agricultural inputs and farm products. Analysis of the rationale, objectives, and major types of agricultural programs and their effects on resource allocation and income distribution within agriculture and between agriculture and the rest of the economy.

PASOUR

EB 435 Urban Economics. *Preq: EB 301. 3(3-0) F,S.* Application of land use and location theory to urban structure and centralized economic activity. Analysis of trends in urbanization and suburbanization. Urban poverty, housing, transportation, pollution and financial problems.

MARGOLIS, PALMQUIST

EB 436 Environmental Economics. *Preq: EB 301. 3(3-0) F,S.* Use of economics in understanding pollution, congestion, conservation and other environmental problems. Relevant economic tools such as pricing schemes, abatement cost curves, damage functions and benefit-cost analysis. Pollution taxes, regulations and subsidies considered in designing alterations in the incentive system. Public policy alternatives examined in the context of non-market decision making.

KNOEBER, PALMQUIST

EB 442 Evolution of Economic Ideas. *Preq: EB 201 or 212. 3(3-0) F,S.* General development of economic ideas from ancient times through Keynes. Emphasis on the classical school and developments thereafter. The evolution of economic ideas in the context of the changes in technology and the increasing complexity of economic activity.

TURNER

EB 448 International Economics. *Preq: EB 301. 3(3-0) F,S.* Trade, investment, monetary relations and certain aspects of economic development. Emphasis on analytical and policy approaches with some study of specific international organizations.

BALL, DUTTON, GRENNES

EB 451 Introduction to Econometrics. *Preqs: EB 301, EB 302, EB(ST) 350. 3(3-0) F.* The measurement, specification, estimation and interpretation of functional relationships through single equation least-square techniques. Simple and multiple regression, curvilinear regression and various transformations will be used to measure demand, cost, production, consumption and investment relationships.

WILSON

EB 460 Marketing Research. *Preqs: EB 311 or 313; and EB (ST) 350. 3(3-0) F,S.* The use, collection, organization and analysis of information pertinent to marketing decisions. Use of qualitative and quantitative data in the solution of specific marketing problems.

COURCHANE, GERSTNER

EB (HI) 470 The Japanese Economy. *Preqs: EB 301; 3 hours HI. 3(3-0) S.* The Japanese evolution from an ancient agrarian economy to a modern industrial nation. Comparative analysis of post-World War II Japanese macroeconomic growth, money and banking, public finance, labor markets, industrial organization, and international trade and finance.

FLATH, R. SYLLA

EB 475 Comparative Economic Systems. *Preq: EB 201 or 212. 3(3-0) F,S.* Concentration on capitalist or market economies which will be contrasted with collectivist types of systems. Emphasis on the Soviet economy.

TURNER

EB (TMT) 482 Textile Marketing Management. *Preqs: EB 313, EB 301, TMT 380. 3(2-2) F,S.* (See Textile Materials and Management).

EB (WPS) 485 Management Development Seminar. *Preqs: EB 201 or 212. This course may not be used for credit toward an economics minor for any graduate degree. 3(3-0).* All the major phases of professional management are covered. Emphasis is placed on developing insight into individual management potential and providing guidance and planning for a management career in industry, government services, or as an entrepreneur. The visiting lecturers, each a management expert, bring insights from their experience.

EB 490 Senior Seminar in Economics. *Preqs: EB 301, EB 302, EB(ST) 350 and two courses from list of economics electives. 3(3-0) F,S,Sum.* The terminal course for a student majoring in Economics and Business. The undergraduate students are assisted in summarizing their training and in improving their capacity to recognize problems, and to select logically consistent means of solving problems. The seminar is kept small to allow individualized instruction.

EB 491 Senior Seminar in Economics. *Preq: EB 490. 3(3-0) F,S,Sum.* An optional continuation of the first semester Senior Seminar. The objective of the course is to provide the student with an opportunity to exercise the skills developed in EB 490. Each student may undertake a special project, or alternatively the investigation of a topic may be undertaken by the seminar group together.

EB 495 Special Topics in Economics and Business. *Preq: Consent of the Department. 1-6.* Presentation of material not normally available in regular course offerings, or offering of new courses on a trial basis.

EB 498 Independent Study in Economics and Business. *Preq: Consent of Department. 1-6. F,S,Sum.* Detailed investigation of topics of particular interest to advanced undergraduates under faculty direction on a tutorial basis. Credits and content determined by faculty member in consultation with Associate Department Head.

Selected 500-Level Courses Open To Advanced Undergraduates

EB 501 Price Theory. *Preqs: MA 113 and EB 301. 3(3-0) F,S.*

EB 502 Income and Employment Theory. *Preqs: MA 113, EB 301, 302 and EB (ST) 350. 3(3-0) F,S.*

EB (RRA) 503 Economics of Recreation. *Preq: EB 301 or 401. 3(3-0).*

EB 512 Law and Economics. *Preq: EB 301 or EB 401. 3(3-0) Alt. F.*

EB 513 Research Methods in Marketing. *Preqs: EB 313, EB(ST) 350, EB 501. 3(3-0) S.*

EB 515 Environmental and Resource Policy. *Preq: EB 301 or EB 401. 3(3-0) Alt. F.*

EB 520 Managerial Finance: Theory and Applications. *Preqs: EB 420 and EB 301 or 401. 3(3-0) S.*

EB 521 Markets and Trade. *Preq: EB 301 or 401. 3(3-0) F.*

EB 523 Planning Farm and Area Adjustments. *Preqs: EB 301, 303 or 401. 3(2-2) S.*

EB 524 Financial Markets. *Preq: EB 501. 3(3-0) S. Alt. yrs.*

EB 525 Managerial Economics. *Preq: EB 301 or 401. 3(3-0) Alt. S.*

EB 532 Economics of Trade Unions. *Preq: EB 301 or 401. 3(3-0).*

EB 533 Economics of World Food and Agricultural Policy. *Preq: EB 301 or 401. 3(3-0) S.*

EB 540 Economic Development. *Preq: EB 301 or 401. 3(3-0).*

EB 551 Agricultural Production Economics. *Preqs: MA 113 and EB 301 or EB 401. 3(3-0) S.*

EB 570 Analysis of American Economic History. *Preq: EB (HI) 371 or grad. standing or PBS status. 3(3-0) Alt. F.*

EB (SOC) 574 The Economics of Population. *Preq: EB 301 or 401. 3(3-0).*

EB (TMT) 585 Market Research in Textiles. *Preqs: TMT (EB) 482. 3(3-0) S.*

EB 590 Special Economics Topics. *Preq: CI. Maximum 6. F,S,Sum.*

EB 598 Topical Problems in Economics. *Preq: CI. 1-6. F,S,Sum.*

ELECTRICAL AND COMPUTER ENGINEERING

ECE 211 Electric Circuits I. *Preqs: Soph. standing and GPA 2.4 or above, with a grade of C or better in ENG 111, MA 102S, MA 201S, and PY 205. Coreqs: PY 208, MA 202S. Correspondence version may be taken only with approval of ECE undergraduate administrator. 3(3-0) F,S,Sum.* Introduction to analysis and design of electric circuits. Circuit elements and parameters, resistance, capacitance, inductance, impedance, admittance, charge, current, voltage, energy, power. Kirchhoff's voltage and current laws. Superposition, periodic functions, RMS values, phasors, resonance, Q, bandwidth. Balanced three-phase systems. D-c, a-c steady state and transient conditions.

ECE 212 Fundamentals of Logic Design. *Preq: Soph. standing and GPA 2.4 or above, with a grade of C or better in ENG 111, MA 102S, MA 201S and PY 205. 3(3-0) F,S,Sum.* Introduction to digital logic design: Boolean algebra, switching functions, Karnaugh maps, modular combinational logic, flip-flops, latches, synchronous sequential circuits, case studies in asynchronous digital design.

ECE 213 Electric Circuits I Laboratory. *Preq: ECE 211 (correspondence students); Coreq: ECE 211. 1(0-3) F,S,Sum.* Laboratory work on material treated in ECE 211 emphasizing elementary design principles.

ECE 214 Fundamentals of Logic Design Laboratory. *Coreq: ECE 212. 1(0-3) F,S,Sum.* Laboratory on material treated in ECE 212 emphasizing elementary design principles.

ECE 301 Linear Systems. *Preq: A grade of C or better in ECE 211. 3(3-0) F,S.* Representation and analysis of linear systems using differential equations, impulse response and convolution, Fourier series, Fourier and Laplace transformations. Emphasis on interpreting system descriptions in terms of realizability, stability, fidelity, and transient and steady-state response.

ECE 302 Electric Circuits II with Numerical Applications. *Preqs: CSC 101 and a grade of C or better in ECE 211. 3(3-0) F,S.* Continuation of study of electric circuits: transient analysis, Fourier series and network analysis. Numerical solutions of practical problems using the computer.

ECE 303 Electromagnetic Fields. *Preqs: MA 301S and a grade of C or better in ECE 211. 3(3-0) F,S.* Static electric and magnetic fields. Early experimental laws and their relation to Maxwell's equations. Force laws and particle ballistics. Propagation, reflection and refraction of plane waves. Transient and steady-state behavior of waves on transmission lines.

ECE 305 Electric Power Systems. *Preq: A grade of C or better in either ECE 211 or ECE 331. 3(3-3) F,S.* Principles, performance and characteristics of power-system components, including direct-current and alternating-current machinery, transformer banks and transmission lines. Principles and analysis of system power flow. Application of microprocessors to machine control.

ECE 314 Electronic Circuits. *Preq: A grade of C or better in ECE 211. 3(3-3) F,S.* Circuit properties of active devices, linear and digital integrated circuits. Fundamentals of electronic design using solid-state devices and integrated circuits.

ECE 318 Computer Organization and Microprocessors. *Preq: CSC 101 and grade of C or better in ECE 212. 3(2-3) F,S.* Digital computer organization. Assembly language programming. Input/output. Interrupts and traps. Direct memory access. Structured program development. Comparison of microprocessor architectures. Detailed study of Motorola 68000.

ECE 331 Principles of Electrical Engineering I. *Preqs: MA 201, PY 208. Not available to EE and CPE majors. 3(3-0) F,S,Sum.* Concepts, units and methods of analysis in electrical engineering. Analysis of d-c and a-c circuits, characteristics of linear and non-linear electrical devices, transformers, motors and control systems.

ECE 332 Principles of Electrical Engineering II. *Preq: ECE 331. Not available to EE and CPE majors. 3(3-0) F,S,Sum.* Principles of electronics, instrumentation and computers. Digital gates and logic systems, operational amplifiers with applications in instruments and analog computers, measuring instruments, microcomputers, sensors and transducers.

ECE 339 Principles of Electrical Engineering Laboratory. *Coreq: ECE 331. Not available to EE and CPE majors. Laboratory work in the material covered in ECE 331. 1(0-3) F,S.*

ECE 342 Design of Complex Digital Systems. *Preq: A grade of C or better in ECE 212; Coreq: ECE 318. 3(3-3) F,S.* Design principles for complex digital systems: iteration, top-down and bottom-up, divide and conquer, and decomposition. Descriptive techniques, including block diagrams and timing diagrams for a machine at the register-transfer level. Hardware-description languages.

ECE 401 Introduction to Signal Processing. *Preqs: ECE 301, ECE 302. 3(3-0) F,S.* Concepts of electrical signal processing. Fourier series, Fourier transform, Z-transform, advanced linear systems and stochastic processes. Analog/digital and digital/analog conversion, digital filters and modulation. Major design project. RAJALA

ECE 409 Introduction to Telecommunications Engineering. *Preq: ECE 301. 3(3-0) F.* Design and operation of telecommunications systems: switching hierarchy, characteristics of signals and impairments, measurements of signals and noise, transmission media, teletraffic theory, switching systems. O'NEAL

ECE 431 Electronics Engineering. *Preqs: ECE 301, ECE 314. 3(2-3) F,S.* Design and analysis of discrete and integrated electronic circuits, from single-transistor stages to operational amplifiers, using bipolar and MOS devices. Feedback in operational amplifier circuits, compensation and stability. Laboratory design projects. PAULOS

ECE 432 Communication Engineering. *Preqs: ECE 301, ECE 314. 3(2-3) S.* Fundamentals of communications engineering. Elements of systems including modulators, demodulators, transmitters, receivers. Bandwidth allocation and optimization examined in time and frequency domains. Laboratory design project involving a complete communications system.

ECE 435 Elements of Control. *Preqs: ECE 301, ECE 302, ECE 314. 3(2-3) F.* Introductory theory of open- and closed-loop control. Dynamic analysis of error detectors, amplifiers, and motors. Component transfer characteristics and block diagram representation.

ECE 436 Digital Control Systems. *Preq: ECE 435. 3(3-0) S.* Discrete systems dynamics, sampled-data systems, mathematical representations of analog/digital and digital/analog conversions, open- and closed-loop systems, input-output relationships, state-space and stability analyses, time- and frequency-domain analyses. Design of digital controllers.

ECE 439 Integrated Circuit Technology and Fabrication. *Preq: ECE 441. 3(2-2) S.* Semiconductor device and integrated-circuit processing and technology. Wafer specification and preparation, oxidation, diffusion, ion implantation, photolithography, design rules and measurement techniques.

ECE (CSC) 440 Digital Systems Interfacing. *Preq: ECE 318 or CSC 312. 3(2-2) S.* Concepts of microcomputer system architecture and applications to fundamental computer hardware. Theory and practical experience in digital system interfacing using a variety of microprocessor peripheral chips with specific microprocessor/microcomputer systems. Practical aspects of interfacing real-world devices to a microcomputer system both from hardware and software points of view.

ECE 441 Introduction to Solid-State Devices. *Preqs: ECE 314, ECE 303. 3(3-0) F.* Basic principles required to understand the operation of solid-state devices. Semiconductor device equations developed from fundamental concepts. P-N junction theory developed and applied to the analysis of devices such as varactors, detectors, solar cells and bipolar transistors. Emphasis on device physics rather than circuit applications.

ECE 443 Advanced Microprocessor Systems Design. *Preq: ECE 318. 3(2-3) F,S.* Advanced topics in microprocessor systems design, including processor architectures, virtual-memory systems, multiprocessor systems, and single-chip microcomputers. Architectural examples include a variety of processors of current interest, both commercial and experimental. Major design project.

ECE 444 Computer Control of Robots. *Preqs: ECE 314, ECE 318. 3(2-3) F,S.* Techniques of computer control of industrial robots: Interfacing with synchronous hardware including analog/digital and digital/analog converters, interfacing noise problems, control of electric and hydraulic actuators, kinematics and kinetics of robots, path control, force control, sensing including vision. Major design project. LUO

ECE 446 VLSI Systems Design. *Preqs: ECE 314, ECE 318. 4(3-2) F,S.* Digital systems design in MOS VLSI technology: MOS device physics, fabrication, primitive components, design and layout methodology, integrated systems, architectures, timing and testing. Trends in VLSI technology. Major design project.

ECE 448 TransmissionLines, Waveguides and Antennas. *Preq: ECE 303. 3(3-0) F.* Transmission and propagation of electromagnetic waves by means of transmission lines, waveguides and antennas. Striplines, directional couplers, metal waveguides, optical fibers and elementary antennas. BLAND

ECE 451 Power System Analysis. *Preq: ECE 305. 3(3-0) F,S.* Long-distance transmission of electric power with emphasis on load flow, economic dispatch, fault calculations and system stability. Applications of digital computers to power-system problems. Major design project. GRAINGER

ECE 452 Power Systems Protection. *Preq: ECE 451. 3(3-0) S.* Elements of protective systems. Principles, construction and operating characteristics of different types of relays. Relays as comparators. Instrument transformers for relaying. Principles and applications of overcurrent, differential, distance and carrier protection. Introduction to digital protection. Design project.

ECE 454 Electric Machinery. *Preq: ECE 305. 3(3-0) S.* Magnetic circuits, transformers, forces and torques in singly- and multiply-excited magnetic fields, dynamic equations of electromechanical devices, principal concepts of rotating machines. Performance of d-c, synchronous and induction machines in transient and steady states.

ECE 455 Computer Control of SCR Motor Drives. *Preq: ECE 305 or ECE 331. 3(1-4) F,S.* Principles of design of silicon-controlled rectifier (SCR) drives for d-c motors operating from single- or three-phase a-c sources. Feedback strategies for computer control of SCR firing angles. Major design project. GOETZE

ECE 457 Semiconductor Power Conversion. *Preq: ECE 314. 3(3-0) F.* Theory and practice of using diodes and thyristors for large-scale conversion of electric power. Rectification, commutation, faults, input/output harmonic content, phase control of power flow. Integers and modes of operation. Bi-directional (four-quadrant) power-flow control techniques. LUBKEMAN

ECE 492 Special Topics in Electrical and Computer Engineering. *Preq: CI. 1-4 F,S.* Offered as needed for development of new courses in electrical and computer engineering.

Selected 500-Level Courses Open To Advanced Undergraduates

Undergraduates taking 500-level ECE courses must have a B or higher average in ECE and MA courses.

ECE 503 Computer-Aided Circuit Analysis. *Preqs: ECE 314, 301. 3(3-0) F.*

ECE 504 Introduction to the Design of Transmission Networks. *Preq: ECE 301. 3(3-0) S.*

ECE (CSC, CSE) 506 Digital Systems Architecture. *Preq: ECE 340 or CSC 312 or CSE 454. 3(3-0) F.*

ECE (CSC, CSE) 510 Software Engineering. *Preqs: CSC 311 and CSC 322 or CSE 453 and CSE 455 or equivalent. 3(3-0) F.*

- ECE 511 Analog Electronics.** *Preq: ECE 431. 3(2-3) F.*
- ECE (CSC, CSE) 512 Compiler Construction.** *Preq: CSC 311 or CSE 453. 3(3-0) S.*
- ECE (CSE) 513 Digital Signal Processing.** *Preqs: ECE 401. 3(3-0) F.*
- ECE 514 Random Processes.** *Preq: ECE 301. 3(3-0) F.*
- ECE 516 System Control Engineering.** *Preq: ECE 435 or ECE 301. 3(3-0) F.*
- ECE (CSC, CSE) 518 Computer Graphics.** *Preqs: MA 405, knowledge of FORTRAN and PASCAL. 3(3-0) F.*
- ECE (CSE) 520 Fundamentals of Logic Systems.** *Preq: ECE 318. 3(3-0) F.*
- ECE (CSE) 521 Digital Computer Technology and Design.** *Preq: ECE 342. 3(3-3) F, S.*
- ECE 530 Physical Electronics.** *Preq: ECE 303. 3(3-0) F.*
- ECE 531 Principles of Transistor Devices.** *Preq: ECE 441. 3(3-0) S.*
- ECE 532 Principles of Microwave Circuits.** *3(3-0) F.*
- ECE (CSE) 533 Digital Electronics.** *Preq: ECE 314. 3(3-0) S.*
- ECE 537 Microwave Device Characterization Techniques.** *Preq: ECE 448. 3(1-5) F.*
- ECE 539 Integrated Circuit Technology and Fabrication.** *Preq: ECE 441. 3(2-2) S.*
- ECE 540 Electromagnetic Fields.** *Preq: ECE 448. 3(3-0) S.*
- ECE (CSC, CSE) 542 Database Management.** *Preq: CSC 431 or CSE (CSC, ECE) 501. 3(3-0) F.*
- ECE 545 Introduction to Radio Wave Propagation.** *Preq: ECE 303. 3(3-0) F.*
- ECE 550 Power System Operation and Control.** *Preqs: ECE 305 or ECE 331. 3(3-0) F.*
- ECE (PY) 552 Introduction to the Structure of Solids.** *Preq: PY 401. 3(3-0) S.*
- ECE (CSE) 558 Digital Image Processing.** *Preqs: ECE 401, ST 371, high-level programming capability. 3(3-0) Every yr.*
- ECE (CSC, CSE, IE, OR) 562 Advanced Topics in Computer Simulation.** *Preq: ST 421 or equivalent or grad. standing. 3(3-0) F.*
- ECE (MAE) 565 Gas Lasers.** *Preqs: MAE 356 or equivalent, PY 407. 3(3-0) F.*
- ECE (CSC, CSE) 571 Data Transmission/Communications.** *Preqs: CSE 454 or CSC 312 or ECE 340; CSE 459 or ECE 301. 3(3-0) S.*
- ECE (CSC, CSE) 572 Computer Communications.** *Preq: CSC 312 or ECE 340 or CSE 454. 3(3-0) F.*
- ECE (CSC, CSE) 574 Real Time Computer Systems.** *Preq: CSC 405 or CSE (CSC, ECE) 501. 3(3-0) Alt. S.*
- ECE 591, 592 Special Topics in Electrical and Computer Engineering.** *3(3-0) F, S.*
- ECE 593 Individual Topics in Electrical and Computer Engineering.** *1-3 F, S.*

EDUCATION

ED 100 Introduction to Industrial Education. *2(2-0) F.* Overview of the field of Industrial and Technical Education in the public schools and community colleges in North Carolina. Orientation to Vocational Industrial Education and Technical Education undergraduate teacher education curricula. Orientation to microcomputers and their potential uses for teachers of industrial and technical education programs.

ED 101 Orientation to Mathematics and Science Education. *New freshmen and transfer students in MED and SED. 0(1-0) F, S.* New freshmen and transfer students (Math/Science Education) are required to attend one hour per week during the first six weeks of the semester. Discussions center on departmental expectations and procedures and effective study habits.

ED 102 Objectives in Agricultural Education. *1(1-0) F,S.* An orientation to the Agricultural Education Program, including an overview of vocational agriculture and related programs of education in agriculture.

ED 105 College Developmental Reading. *Credit is not applicable toward graduation in any curriculum. 3(3-0) F,S,Sum.* Instruction and practice in reading comprehension and study skills; emphasis upon building literal, interpretive, and evaluative levels of comprehension and upon improving study skills.

ED 200 Principles for Teaching Geography. *3(3-0) S.* Basic ideas in the field of geography. The scope of geography as an academic field explored. Emphasis placed on mastery of tools needed for teaching geography, e.g., maps, globes, pictures, graphs, landscape, and media materials and sources. Provides an understanding of the interaction between people and their physical environment.
HARPER

ED 201 Alternative Education Agencies. *3(3-0) F.* Explores alternate forms of education beyond the setting of the formal school. Content includes a variety of educative mechanisms in society as they relate to socio-economic and demographic characteristics and emerging values.

ED 203 Introduction to Teaching Mathematics and Science. *3(2-3) F,S.* Introduces prospective teachers to the teaching of mathematics and science in the middle and secondary school. As an important part of the course students serve as aides to a classroom teacher in a middle or secondary school. Ideas and questions arising from this experience provide an integral part of the classroom instruction on campus.

ANDERSON, WATSON, WHEATLEY

ED 204 Introduction to Teaching Marketing Education. *3(2-3) F Alt. yrs.* Participation in classroom instruction in Marketing Education through observation and structured assistance. The goals of the curriculum and scope of the field presented.

ED 205 Introduction to Teaching Humanities and Social Sciences. *Preq: Sophomore standing. 3(2-3) S.* For prospective teachers in secondary and middle years social studies, English, language arts, and foreign languages. An emphasis on differing aspects and procedures of instruction and analysis of the competencies required of teachers. Field work in a variety of educational settings including an extended period in one curriculum area.

HARPER, PARRAMORE, PRITCHARD

ED 206 Introduction to Teaching Agricultural Education. *3(2-3) S.* Introduction to teaching agricultural education in the secondary school. Ideas and questions arising from the field experience or course assignments will be addressed as an integral part of the regular classroom instruction. Students will serve as assistants to a classroom teacher in a secondary school.

ED 209 Introduction to Teaching Vocational Industrial Education. *Preqs: ED 100 and sophomore standing. 3(2-3) S.* Introduces prospective teachers of Industrial Cooperative Training and of other trade and industrial education courses to teaching at the secondary school level. Field observation of competencies and strategies of successful teachers. Opportunity to observe and work with students in a secondary school setting.

FOELL

ED 220 Introduction to Paraprofessional Counseling. *Preq: Sophomore standing. Priority will be given to resident advisors and students active in student organizations or volunteer programs. 2(2-0) F,S.* A study of peer counseling concepts with opportunity for the development of paraprofessional counseling skills. Major consideration is given to developmental issues of young adulthood and crisis intervention.

ED 221 Career and Personal Development. *3(3-0) F,S.* Designed to help persons acquire the knowledge, self-understanding, and skills needed for career and personal development. Factors which influence career development, such as self-concept, values, abilities, interests, employment trends, and life style, are studied and related to each student. Career development theories and decision making skills are applied to career choice and development.
GERLER, JONES

ED 242 Introduction to Teaching Industrial Arts. *Preq: Nine semester hours in industrial arts. 3(2-4) S.* To provide in-school experience for sophomore students. This will consist of observation, instructing individual students and small groups or providing aid to the local teachers in laboratory management and maintenance. Lecture and discussion will correlate these activities with teaching theory and practice.

ED 296 Special Topics in Education. *1-3. F,S.* Individual or group study of particular areas of education at the Freshman and Sophomore levels. Specific topics will vary from semester to semester. The suffix will indicate the department offering the course: (A) Counselor Education, (B) Occupational Education, (C) Curriculum and Instruction, (D) Mathematics and Science Education.

ED 300 Occupational Survival Skills for the Workplace of the Future. *Preq: Sophomore standing. 3(3-0) F.* Overview of the nature of work and the workplace of the future. Focuses specifically on the skills necessary for successful participation in a number of fields. Alternative career ladders and personal learning plans are explored. DILLON

ED (PHI) 304 Philosophy of Education. *3(3-0) S. Alt. yrs. (See Philosophy.)*

ED 305 Trade Analysis in Course Development. *Preq: ED 100. 3(3-0) S.* Selection and analysis of teaching activities for a functional plan of instruction. Development of instructional units based on analysis of a trade or technical occupation or activity. Preparation of a detailed course of study.

ED 306 Middle Years Reading. *Preq: 6 hours ED and/or PSY. 3(3-0) S.* Methods and materials for teaching reading skills in middle years with emphasis on application of the reading process to content area reading.

ED 307 Teaching Writing Across the Curriculum. *Preq: ENG 112. 3(3-0) S.* Designed for prospective teachers of all disciplines and grade levels. Practical strategies for using writing as a learning tool and enhancing composing ability. Students participate as writers and learners while developing writing lessons and assignments appropriate to their content areas. PRITCHARD

ED 309 Teaching in the Middle Years. *Preq: 6 hours ED/PSY. 3(3-0) S.* Examines the nature and purposes of middle and junior high schools. Explores early adolescent development, curriculum, teaching/learning methods, school organization, and characteristics of effective middle years teachers. ARNOLD

ED 313 Contemporary Vocational Agriculture. *3(3-0) F,S.* The contemporary vocational agriculture program is examined in relation to changing and expanding career opportunities in Agricultural Education. Emphasis is given to the continuing adjustment of program objectives, curriculum organization, content of courses, teaching practices, instructional resources and evaluation in vocational agriculture programs.

ED 325 Curriculum and Methods of Teaching Marketing Education. *Preq: ED 204. 3(3-0) F Alt. yrs.* Study of the curriculum common to Marketing Education programs and the research behind its development. Methods common to instructional planning, implementation, and evaluation of effective marketing programs.

ED 327 History and Philosophy of Industrial and Technical Education. *Preq: ED 100. 3(3-0) F.* The industrial and technical education movement in the United States and the changing concepts of industrial technical education as related to the economic, sociological and psychological aspects of American education. FARMER

ED 340 Survey of Vocational Education. *Preq: Six hours of ED or PSY. 3(3-0) S.* Characteristics of vocational education program areas; settings and purposes of vocational education; contemporary trends and issues in vocational education programs. CLARY

ED 341 Field Work in Occupational Education. *Preqs: Jr. standing in AED, HOE, IAE, TED, or VIE; Prior arrangements with supervising instructor. May be repeated to a maximum of 6 credits. 2-6. F,S,Sum.* A supervised off-campus field experience in Occupational Education that relates on-the-job experiences in the field to the technical competencies which are the content of the curriculum. CLARY

ED 344 School and Society. *Preq: Jr. standing. 3(3-0) F, S, Sum.* The interrelationship between the school and other institutions, values, and patterns of thought in American society. BEEZER, SEROW

ED 352 Survey of the Health Occupations. *3(3-0) S.* An examination of key occupations and professions in the health cluster. Emphasis is on educational preparation, requirements for practice, potential advancement, inter and intra professional relationships, ethical foundations of practice, and the concept of commitment. Theoretical concept of role structure and function. DAVIS

ED 353 Strategies of Teaching a Health Occupation. *Preqs: PSY 304, PHI 304. 3(3-0) F.* Planning and implementation of instructional strategies for clinical and classroom settings. Focus on the development of competencies for effectively implementing a curriculum in a health occupation. The nature of the teaching/learning process, psychological and philosophical aspects of teacher choice of various strategies will be examined. DAVIS

ED 354 Evaluative Skills of Teaching a Health Occupation. *Preq: ED 353. 3(3-0) S.* Formative and summative evaluation of curriculum, instruction, learning, and clinical performance. Attention is devoted to analysis of existing instruments/designs for clinical evaluation with respect to validity and reliability. Students will acquire skills in the development of instruments to evaluate clinical performance and the construction of test items. DAVIS

ED 357 Administration and Supervision of Student Organizations. *Preq: Sophomore standing. 3(3-0) F.* History and purposes of student organization activities in education. Emphasis on the administration and supervision of these activities. Special attention to the skills necessary for the successful organization, management and leadership development of student activities. FARMER

ED 358 Problems in Health Education. *3(3-0) S.* Emphasis on education of the public regarding general health concerns including cancer, cardiovascular disease, accident prevention, nutrition, drugs, alcohol, mental health, sexuality, and environmental hazards. TURNBULL

ED 362 Curriculum and Methods in Industrial Arts. *Preqs: Open only to Industrial Arts Education majors admitted to teacher education candidacy. 4(3-2) S.* Methods and means of becoming an effective industrial arts teacher. Emphasis on the rationale and objectives of Industrial Arts Education, curriculum and instructional development, delivery strategies, evaluation, laboratory management, student clubs and teaching the disadvantaged and handicapped.

ED 400 Value Development. *Preq: Junior standing. 2(2-0) S.* Kohlberg's theory of the development of moral judgment applied to value dilemmas commonly confronted by young adults and adults in general. Structured and unstructured identification of stages of moral reasoning. Independent formulation of value dilemma issues. Basic small group communication skills for synthesis of value dilemma issues and their analysis. McVAY, SPRINTHALL

ED 403 Methods and Materials in Teaching English as a Second Language. *Preqs: Teacher Certification; ENG 324, ANT 252, SP 335, FL 260; Coreq: ED 404. Taught during the first seven weeks of the semester. 5(4-2) F.* Current methods and materials in teaching English as a Second Language, including the use of instructional media. MALINOWSKI

ED 404 Student Teaching in English as a Second Language. *Coreq: ED 403. 8(2-15) teaching F.* Provides the prospective teacher of English as a Second during a 10-week experience Language an opportunity to develop and practice the competencies essential for language of full-time teaching in a selected ESL classroom. MALINOWSKI

ED 405 Industrial and Technical Education Shop and Laboratory Planning. *Preqs: Sr. standing, six hours of drawing and design. 3(3-0) F.* Principles and techniques of planning and organizing shop and laboratory facilities. Problems of locating and equipping vocational schools; the planning and layout of shops and related technology laboratories and classrooms. Individual and group assignments on planning and layout of post-secondary school buildings.

ED 407 Methods of Teaching Agricultural Mechanics. *Preqs: BAE 201 or BAE 211. 3(3-0) F.* Designed to develop competencies for beginning teachers to organize and conduct an instructional program of agricultural mechanics. Emphasis on planning and developing instructional program materials and demonstration techniques; and on planning and managing a laboratory facility.

ED 411 Student Teaching in Agriculture. *Preqs: ED 313, 344, PSY 304; senior standing, admission to teacher education. 8(2-15) F,S.* During student teaching, prospective teachers develop skills and techniques involved in teaching vocational agriculture. Each student spends about 9 weeks full-time in a public school. In addition to teaching classes, the student teacher is expected to become familiar with the total program of the school and to participate in as many school activities as possible.

ED 412 Teaching Adults. *Preq: Admission to student teaching semester (ED 102 and 313). Taught during the first five weeks of the semester. 2(2-0) F,S.* Principles of teaching adults applied to vocational agriculture. Experience in planning, organizing and teaching adult groups in various vocational agriculture settings.

ED 413 Planning Educational Programs. *Preq: Admission to student teaching semester (ED 102 and 313). Taught during the first five weeks of the semester. 2(2-0) F,S.* Principles, resources and field work relating to educational program planning in agriculture.

ED 414 Human Relations and Discipline in the Classroom. *Preqs: PSY 304 and 6 hours of education. 3(3-0) F.* Designed to help prospective teachers foster positive interpersonal relationships in classrooms, build a sense of community and create a purposive environment for learning. Investigates issues such as group building, active listening, and major approaches to discipline. Uses case studies and problem solving methods.

ARNOLD

ED 415 The Arts and Adolescence. *Preq: 6 hours ED and/or PSY. 2(2-0) S.* The relationship of the arts to the academic work of adolescent learners. Explores arts and adolescent development; arts and learning processes within and outside of the classroom; experimentation and skill development in graphic arts, sculpture, music, drama, dance/movement, film, and poetry.

ED 416 Teaching Exceptional Students in the Mainstreamed Classroom. *Preq: Six hours ED and/or PSY. 3(3-0) S.* Provides classroom teachers in all disciplines and grade levels with a knowledge of various handicapping conditions, as well as with techniques to assist exceptional students within the mainstreamed classroom.

ED 421 Principles and Practices of Cooperative Vocational Education. *Preq: Admission to Teacher Education candidacy. 3(2-2) F. Alt. yrs.* Principles, objectives, operation and evaluation of cooperative programs in Vocational Education focusing on the role and duties of teacher-coordinators.

FARMER

ED 422 Methods of Teaching Vocational Industrial/Technical Education. *Preq: Admission to Teacher Education candidacy. 3(3-0) S.* Methods and techniques of teaching industrial subjects: preparation of lesson plans, techniques of presentation, use of teaching aids and materials, class organization, shop safety and evaluation.

ED 423 Methods and Materials in Teaching Modern Foreign Languages. *Preq: Admission to professional semester; Coreq: ED 424. Taught during the first seven weeks of the semester. 5(4-2) F.* Methods and materials for teaching modern foreign languages including the use of instructional media.

MALINOWSKI

ED 424 Student Teaching in French or Spanish. *Preq: Admission to professional semester; Coreq: ED 423. 8(2-15) F.* Provides prospective teachers of French or Spanish a ten-week teaching experience in a selected school, under the supervision of a cooperating high school teacher and a university faculty supervisor.

MALINOWSKI

ED 426 Administration of Marketing and Distributive Education. *Preq: ED 204. 3(3-0) S Alt. yrs.* Provides the theory and skills necessary to plan, administer, operate, and evaluate effective programs in Marketing Education.

ED 430 Methods and Materials for Teaching Language Arts in the Middle Grades. *Preqs: ED 205, 309, 344, PSY 304; senior standing; admission to Middle Grades Education. 4(3-2) F.* Demonstration and activity-oriented course provides opportunities for prospective teachers to integrate their knowledge of subject matter with effective materials and methods of instruction. Students make guided observations, plan lessons and units, and practice varied classroom models and strategies in micro-lessons. Prepare students for their responsibilities in teaching language arts in the middle schools. PRITCHARD

ED 433 Health Occupations Specialty Practicum. *Preq: Current credential in a recognized health discipline. 6 Arranged.* Provides prospective teachers an opportunity to acquire new content and depth in their particular health discipline. The requirements may be fulfilled by a combination of advanced course work related to the speciality and through individually designed practicums. The practicum will be arranged in an appropriate health care environment with selected and qualified preceptors. DAVIS

ED 434 Health Occupations Teaching Practicum. *Preqs: ED 344, 352, 353, 354, PSY 304, PHI 304 and admission to teacher education. For Health Occupations Education Majors only. Coreq: PSY 476. 8(3-15) S.* Practical teaching experience to integrate the skills and techniques of teaching a health occupation. Through cooperation with health occupations programs in hospitals, community colleges, technical institutes and secondary schools, a teaching practicum in the student's specific health discipline will be arranged. DAVIS

ED 435 Methods and Materials for Teaching Social Studies in the Middle Grades. *Preq: Admission to professional semester. 4(3-2) F.* Teaching techniques and development of teaching and evaluation skills in middle grades social studies. Adapting instruction to individual learner differences. Creating instructional materials appropriate for use in social studies teaching. HARPER

ED 438 Student Teaching in Marketing Education. *Preq: Admission to professional semester; Coreq: ED 493. 8(2-15) S.* Provides prospective teachers the opportunity to develop the skills and techniques required in the Marketing Education classroom. Student teachers spend ten weeks full-time in a public school: observing, teaching, and participating in the total school program.

ED 444 Student Teaching in Vocational Industrial/Technical Education. *Preqs: ED 344, PSY 304; senior standing, admission to teacher education. 8(2-15) S.* Provides prospective teachers an opportunity to acquire experience in the techniques and skills involved in teaching vocational industrial/technical education curricula. Students will devote the semester to full-time off-campus teaching in selected schools. In addition to acquiring competencies essential for teaching vocational industrial/technical subjects, the student teacher will have an opportunity to become familiar with the total operation of a school program and with cooperating industries in the community.

ED 450 Methods and Materials in Teaching English. *Preqs: ED 205, 344, PSY 304; senior standing and admission to Teacher Education candidacy with a major in English. Taught during the first seven weeks of the semester. 3(2-3) F.* History, purposes, curricula, methods, and materials of teaching English in grades 9-12, with an emphasis on student application and practice in teaching literature, study skills, speaking, listening, and writing. PRITCHARD

ED 451 Improving Reading in Secondary Schools. *Preq: Six hours of ED and/or PSY. 2(2-0) F,S.* A study of methods and materials for teaching reading in the secondary school, with an emphasis on the effective use of written materials for content area instruction.

ED 454 Student Teaching in English/Language Arts. *Preqs: ED 205, 344, PSY 304. Senior standing, admission to Teacher Education, 2.1 overall average, 2.2 in English. 1-8. F.* Provides the prospective teacher with experience in the techniques and skills involved in teaching English. Each student during the senior year will spend 8 weeks in a selected off-campus center. In addition to acquiring teaching competencies, the student teacher may become familiar with the total school program and may participate in as many school and community activities as time permits. PRITCHARD

ED 460 Methods and Materials in Teaching Secondary School Social Studies. *Preqs: ED 205, 344, PSY 304, sr. standing and admission to Teacher Education with a major in either history, sociology, political science. Taught during the first seven weeks of the semester. 4(3-1) F.* Teaching techniques, innovations, and development of teaching and evaluation skills in the area of secondary school social studies. Adaptation of instruction to individual learner differences, and selection and design of instructional materials. Taught during the first seven weeks of the semester. HARPER

ED 464 Student Teaching in Social Studies. *Preqs: Admission to student teaching and PSY 304; Coreq: for LTH, LTP, LTS: ED 460; for MSL: ED 454, ED 414; for MST: ED 414, 3-8 (2-18) F.* Skills and techniques in teaching social studies in secondary and middle schools. Each student spends ten weeks in a selected off-campus center. The student demonstrates competencies essential for teaching social studies, becomes familiar with the total school program, and participates in a variety of school and community activities. HARPER

ED 470 Methods and Materials for Teaching Mathematics. *Preq: Admission to Teacher Education. Taught during the first seven weeks of the semester. 3(3-0) F.* A study of the purposes, methods, materials, curricula and evaluation practices appropriate for teachers of mathematics at the secondary level. KOLB, STIFF, WATERS, WATSON

ED 471 Student Teaching in Mathematics. *Preq: Admission to professional semester; Coreqs: ED 470. 3-8 F.* Supervised practice in a selected middle or secondary school for 10 weeks, to develop the skills and techniques for teaching mathematics. KOLB, STIFF, WATERS, WATSON

ED 472 Teaching Mathematics Topics in Senior High. *Preq: Admission to professional semester; Coreq: ED 470. Taught during the first 7 weeks of the semester. 3(3-0) F.* Preparation for teaching mathematics from both the college preparatory (algebra, geometry, trigonometry, advanced mathematics) and general courses (general mathematics, technical and consumer mathematics) offered in grades 9-12 KOLB, STIFF, WATERS, WATSON

ED 473 Student Teaching in Industrial Arts. *Preq: Admission to professional semester; Coreqs: ED 479 and ED 492. 3-8. F.* Students participate in off-campus student teaching in selected public schools, acquiring competencies for teaching industrial arts and familiarity with the total context in which the Industrial Arts Education program occurs. WENIG

ED 474 Teaching Mathematics Topics in the Middle Grades. *Preq: Admission to professional semester; Coreq: ED 470. Taught during the first 7 weeks of the semester. 3(3-0) F.* Methods of teaching arithmetic, geometry, and pre-algebra topics in grades 6-9. Emphasis approaches that actively involve learners and relate operations on content and pictorial representations to mathematical symbols. KOLB, STIFF, WATSON

ED 475 Methods of Teaching Science. *Preqs: ED 203, 344, PSY 304. Coreq: ED 476. Taught during the first seven weeks of the semester. 3(3-0) F.* Goals, methods, curricula, and evaluation practices in teaching the physical and biological sciences at the middle and secondary school levels. ANDERSON, WHEATLEY

ED 476 Student Teaching in Science. *Preqs: ED 203, Ed 344, PSY 304; Coreq: ED 475. Students must have senior standing and be admitted to the professional semester. 3-8. F.* Supervised classroom experience in developing the skills and techniques for teaching science in a selected middle or secondary school for 10 weeks. ANDERSON, WHEATLEY

ED 477 Instructional Materials in Science. *Preqs: ED 203, 344, PSY 304; Coreqs: ED 475, 476. Part of professional semester; 2 lecture hours and 6 lab hours per week for 7 weeks.* Development and selection of teaching materials that reflect concepts of content and emphasis in middle and secondary school science. Experimental and laboratory approaches. ANDERSON, WHEATLEY

ED 478 Extension as Non-Formal Education. *Preq: Advanced undergraduate or PBS. 3(3-0) S.* Extension as a system of non-formal education, how it functions in USA and other countries (with special attention to agricultural extension), historical antecedents and philosophical foundations, mission, organization, methods; problems dealt with; how technology and behavioral sciences are/can be utilized; provides actual experience with Extension and with conceptual/theoretical ideas that undergird practice. Day field trips required.

CARTER

ED 479 Industrial Arts Laboratory Planning. *Preq: Junior standing in Industrial Arts Education; Coreqs: ED 473 and ED 492 3(1-4) F.* Industrial arts laboratory planning for efficient and safe operations management of materials and supplies, budgeting, inventory, maintenance of common tools and equipment, safety equipment, and regulations and practices pertaining to laboratory operations are considered.

ED 480 Teaching Mathematics with Microcomputers. *Preqs: CSC 161, ED 203; MA 102 or 112. 3(2-2) F,S.* Techniques and skills needed to use the microcomputer as a tool in mathematics learning. Issues and research findings affecting the use of microcomputers in mathematics instruction. Development of computing and problem solving skills in areas of the secondary school mathematics curriculum such as algebra, geometry and statistics.

STIFF

ED 483 An Introduction to Media and Instructional Technology. *Preq: Junior standing. 3(3-0) F,S.* Survey of instructional media and instructional technology. Relationship between media and instructional objectives. Projects in designing and developing instructional media materials and using instructional computing software.

VASU

ED 488 Basic American Sign Language. *3(3-0) F.* Skill training in basic vocabulary acquisition and grammar of American Sign Language, ASL, used by a majority of deaf people who sign.

ED 490 Senior Seminar in Agricultural Education. *For Agricultural Education majors only; maximum of three credits can be obtained. 1(1-0) F,S.* Analysis of opportunities and problems facing educational leaders in agriculture with emphasis upon current problems.

JEWELL

ED 491 Senior Seminar in Industrial and Technical Education. *Preq: Sr. standing in VIE or TED. 1-3 S.* Discussion and analysis of various problems and issues of importance and interest to student teachers and other future professionals in Industrial and Technical Education.

ED 492 Senior Seminar in Industrial Arts Education. *Preqs: Junior standing in Ed. and consent of the department. 1-3. F,S.* An in-depth investigation of a topic or a set of problems and/or issues in Industrial Arts Education.

ED 493 Senior Seminar in Marketing Education. *Preq: Admission to professional semester; Coreq: ED 438. 3(3-0) S.* Marketing Education majors analyze and discuss problems and successes experienced while student teaching in the public schools.

ED 495 Senior Seminar in Mathematics and Science Education. *Preq: Advanced undergraduate and consent of department. 1-3 F,S.* An in-depth investigation of a teaching area in mathematics or science education during or after the student teaching semester.

ED 496 Special Topics in Education. *Preq: Junior or senior standing and consent of instructor. 1-3 F,S,Sum.* Individual or group study of special topics in professional education. The topic and mode of study are determined by the faculty member after discussion with the student.

ED 497 Honors Seminar in Occupational Education. *Preq: Permission of instructor. 1(1-0) F,S.* Topics of professional importance for occupational education honors program students. Presentations on a wide range of seminar topics and their implications for occupational education.

PETERSON

Selected 500-Level Courses Open To Advanced Undergraduates

ED 501 Computer Applications in Instruction. *Preq: Six hrs. ED or PSY or CI. 3(3-0) F,S.*

ED 506 Education of Exceptional Children. *Preq: 9 hours of ED or PSY. 3(3-0) F,S,Sum.*

ED 510 Adult Education: History, Philosophy, Contemporary Nature. *Preqs: Advanced undergrad., CI. 3(3-0) F,S.*

ED 514 Formative Ideas in American Education. *Preq: Six hours ED or PSY or CI. 3(3-0) F.*

ED 515 Education and Social Diversity. *Preq: Six hours ED, PSY and/or social science. 3(3-0) Alt. S.*

ED 519 Early Childhood Education. *Preq: PSY 475 or PSY 576. 3(1-4) S,Sum.*

ED 520 Introduction to Guidance and Counseling. *Preq: Six hours in ED or PSY. 3(3-0) F,S,Sum.*

ED 522 Career Exploration. *Preq: 12 hours ED or CI. 3(3-0) F,S,Sum.*

ED 542 Contemporary Approaches in the Teaching of Social Studies. *Preq: Advanced undergrad. or grad. standing; must have completed student teaching. 3(3-0) S.*

ED 544 The Teaching of Composition. *Preq: 9 hours of ED, PSY and/or ENG. 3(3-0) S.*

ED 546 Reading in the Content Areas. *Preq: Six hrs. in ED or PSY. 3(3-0) F,S.*

ENGLISH

FRESHMAN ENGLISH

ENG 110 Developmental English. *Credit is not applicable toward graduation in any curriculum. Students placed in ENG 110 must receive a grade of S in order to advance to ENG 111. 3(3-0) F,S,Sum.* A study of the fundamentals of English for the purpose of developing the basic skills of writing, conducted by means of supervised writing exercises and self-paced drills. Includes parts of speech; principles of spelling, capitalization, and punctuation; vocabulary study; and composition of sentences and simple paragraphs.

ENG 111 Composition and Rhetoric. *Successful completion of ENG 111 requires a grade of C or better. 3(3-0) F,S,Sum.* Intensive study and practice in the basic forms and principles of expository communication; emphasis on correctness in writing and skill in organization; weekly exercises in composition planned out of class and executed in class; frequent conferences with instructor.

ENG 112 Composition and Reading. *Preq: A grade of C or better in ENG 111. 3(3-0) F,S,Sum.* Continued practice in expository writing; numerous short themes and a research paper; introduction to literary types; frequent conferences.

NOTE: ENG 111 and 112 must be scheduled in successive semesters until they are completed satisfactorily.

NOTE: Qualified students will be allowed to register for ENG 112H and will be given credit for ENG 111 upon successful completion of the course. Eligibility for ENG 112H is based on the student's predicted grade in English.

WRITING AND LANGUAGE

The prerequisite for all courses in writing and language at the 200-level and above is the completion of ENG 111 and ENG 112.

ENG 214 Copyediting. *3(3-0) F,S,Sum.* Basic writing and editorial skills needed to work effectively with material produced by others. Emphasis on mechanical editing (e.g., consistency and correctness of punctuation, capitalization, spelling, hyphenation, parallelism, bibliographical references, illustrations, and headings) and substantive editing (rewriting, reorganizing, or suggesting other ways to present material).

COCKSHUTT, COVINGTON, C. MILLER, POLLARD

ENG 215 Principles of News and Article Writing. *3(3-0) F,S,Sum.* Introduction to the techniques of conducting interviews and writing news stories including feature articles for a variety of news media. COCKSHUTT, RUDNER

ENG 221 Communication for Business and Management. *3(3-0) F,S,Sum.* Offers students in business, management, pre-law, and other non-technical curricula the necessary communications skills to produce the routine and specialized reports required of managers and administrators in business, government, and industry. Topics of study include the public relations aspects of business writing; organizational, progress, and persuasive reports; sales, personnel, and form reporting; the use of forms in business, and routine and specialized business correspondence.

ENG 288 Fiction Writing. *3(3-0) F,S.* Experience in writing short prose fiction. Class critiquing of student work and instruction in techniques of fiction. KESSEL, SMITH

ENG 289 Poetry Writing. *3(3-0) F,S.* Experience in writing poetry. Class critiquing of student work and instructions in techniques of poetry. BARRAX, KATZ

ENG 315 Advanced News and Article Writing. *Preq: ENG 215. 3(3-0) F,S.* A journalism course emphasizing writing news stories, profiles, features and investigative stories and including analysis and critical reading of print media. COCKSHUTT, RUDNER

ENG 321 The Communication of Technical Information. *Preq: Junior standing. 3(3-0) F,S,Sum.* Intensive training in the fundamentals of technical and scientific writing for students in scientific and technical curricula. Emphasis on day-to-day communications problems in their future careers and on the wide variety of formal and informal reports encountered in the scientific community.

ENG 322 Advanced Composition and Rhetoric. *Preq: Juniors and seniors only. 3(3-0) F,S.* Rhetoric as a theory of communication, involving both psychological and social processes; and as a method for composition, involving invention, arrangement, and style. Traditional and modern views of rhetoric, emphasizing the differences between persuasion as manipulation and persuasion as the creation of agreement. Extensive practice in composing essays, letters, editorials; improvement through criticism and revision.

BETTS, CARTER, COVINGTON, C. MILLER, PENROSE

ENG 324 Modern English. *3(3-0) F.* A study of modern English primarily intended for candidates for teaching certificates. Attention given to problems of composition, dialect, and usage. FENNELL, HOLLOWAY, MEYERS

ENG 326 History of the English Language. *3(3-0) S.* A survey of the growth and development of the English language from its Indo-European sources to the present. Emphasis on detailed changes in sound, syntax, and meaning through this period.

FENNELL, HOLLEY, MEYERS

ENG 488 Advanced Fiction Writing. *A grade of B or better in ENG 288 or 289, or demonstrated competence in creative writing. 3(3-0) F,S.* Workshop in creative writing for the student with demonstrated understanding of the basic techniques of writing prose fiction. KESSEL, L. SMITH

ENG 489 Advanced Poetry Writing. *A grade of B or better in ENG 288 or 289, or demonstrated competence in creative writing. 3(3-0) S.* Workshop in creative writing for the student with demonstrated understanding of the basic techniques of writing poetry. BARRAX

ENG 495 Seminar in Writing-Editing. *Preq: Major in LWE. 3(3-0) F,S.* A projects course for seniors in Writing-Editing in which students apply the principles and experiences gained in their previous study to practical problems and situations. Discussions of standards, references, current problems, and aspects of publication beyond the written word-format, design, and production. The goal is to provide a forum for development of professional skills and judgment.

COCKSHUTT, COVINGTON, HERNDL, C. MILLER, RUDNER

LITERATURE

The prerequisite for all courses in literature at the 200-level and above is the completion of ENG 111 and ENG 112.

ENG 205 Studies in Great Works of Literature.* 3(3-0) F,S,Sum. Literary masterpieces from the classical period to the present. Emphasis on reading for understanding and enjoyment both of the works themselves and the cultural contributions to Western civilization of the periods from which the works are drawn.

ENG 206 Studies In Drama.* 3(3-0) F,S. Selected drama from the classical period to the present. Emphasis on reading for enjoyment as well as understanding theory and development of tragedy, comedy, and other modes of dramatic expression.

ENG 207 Studies in Poetry.* 3(3-0) F,S. Analysis of poetry and the critical approaches to it. Emphasis on appreciation of the nature of poetry, understanding features and techniques, and the importance of both historical context and new critical techniques.

ENG 208 Studies In Fiction.* 3(3-0) F,S,Sum. Representative examples from the Renaissance to the present, emphasizing understanding and appreciation of fiction as a genre, a knowledge of the features and techniques of fiction, and a sense of the historical development of this genre.

ENG 209 Introduction to Shakespeare. *Will not satisfy requirements in the English major.* 3(3-0) F,S. A general interest course in Shakespeare primarily for non-English majors. Seven to ten major plays, including representative comedies, histories, and tragedies, will be studied with emphasis on the dramatic aspects.

ENG 248 Introduction to Black American Literature. 3(3-0) F,S. Black American writing and relationships to American culture. Emphasis on modern autobiography, novel, short story, drama, poetry. Includes such writers as Baldwin, Ellison, Morrison, Walker, Malcolm X, Angelou, Wright, Baraka, Randall, and Reed.

BARRAX, HOLLOWAY, LARYEA, MacKETHAN, PETTIS

ENG 251 Major British Writers. *Credit will not be given for both ENG 251 and either ENG 261 or 262.* 3(3-0) F,S,Sum. A study of eight or nine major British authors: Chaucer, Shakespeare, Milton; one author each from the eighteenth century, the Romantic Period, the Victorian Age; and the twentieth century; and one or two more authors of the instructor's choice.

ENG 252 Major American Writers. *Credit will not be given for both ENG 252 and either ENG 265 or 266.* 3(3-0) F,S,Sum. A study of about ten of the most significant American authors such as Hawthorne, Melville, Whitman, Twain, Eliot and Faulkner.

ENG 261 English Literature I. 3(3-0) F,S,Sum. Survey of English literature from its beginnings until 1660, including such figures as Chaucer, Spenser, Marlowe, Shakespeare, Jonson, Donne, and Milton.

ENG 262 English Literature II. 3(3-0) F,S,Sum. Survey of English literature from 1660 to the present, including such figures as Dryden, Pope, Swift, Johnson, Wordsworth, Coleridge, Byron, Keats, Shelley, Browning, Tennyson, Joyce and T.S. Eliot.

ENG 265 American Literature I. 3(3-0) F,S,Sum. Survey of American literature from the Colonial beginnings until the Civil War, including such figures as Edwards, Franklin, Irving, Cooper, Hawthorne, Emerson, Melville, Poe and Thoreau.

ENG 266 American Literature II. 3(3-0) F,S,Sum. Survey of American literature from the Civil War to the present, including such figures as Whitman, Dickinson, Twain, Crane, James, Frost, Eliot, Fitzgerald, Hemingway and Faulkner.

ENG 298 Special Projects in English. 1-3 F,S,Sum. Faculty-guided independent study, or courses on special topics determined by departmental interest or need.

*The courses ENG 205, 206, 207, and 208 are designed for students not enrolled in Humanities and Social Sciences.

ENG 305 Women in Literature: Female Writers and Their Female Characters. *3(3-0) S.* Diverse images of women and cultural assumptions about women in nineteenth and twentieth century American and British literature by women writers. The female literary imagination as it pertains to female characters and issues particularly relevant to women.
BAINES, DOWNS, LOMPERIS, PETTIS

ENG 346 Literature of the Western World I. *3(3-0) F.* Selections from English translations of the Old and New Testaments, Homer, Virgil, Dante, and other writers from the 8th century B.C. to the 14th century A.D. Emphasis on their influence on literature in English.
LOMPERIS, N. SMITH, SMOOT

ENG 347 Literature of the Western World II. *3(3-0) S.* Continental literary activity from the Renaissance to 1900. Renaissance writers such as Rabelais, Boccaccio, and Cervantes; moves to the work of neoclassical writers such as Moliere, Racine, and Voltaire; and concludes with writers such as Rousseau, Dostoevsky, and Tolstoy, who represent the various currents of style and thought that mark the beginning of the modern world.
KNOWLES, N. SMITH, SMOOT

ENG 362 The British Novel of the 18th Century. *3(3-0) S.* The British novel of the eighteenth century with emphasis on major novelists such as Defoe, Fielding, Smollett, Richardson, and Austen.
DURANT, MOORE, WYRICK

ENG 363 The British Novel of the 19th Century. *3(3-0) F.* The British novel of the nineteenth century with emphasis on major novelists such as Scott, Dickens, Thackeray, Eliot, and Trollope.
ENGEL, KING

ENG 369 American Novel of the 19th Century. *3(3-0) F.* Reading and analysis of about twelve major novels that illustrate the development of the romantic novel (Brown, Cooper, Hawthorne, Melville), the realistic novel (DeForest, Twain, Howells, James), and the naturalistic novel (Norris, Crane, Dreiser), with additional readings in background and criticism.
BASSETT, E. CLARK, J. CLARK, KNOWLES, PRIOLI

ENG 371 The Modern Novel. *3(3-0) S.* This course examines background and pattern and analyzes major examples of the twentieth-century novel.
E. CLARK, HALPEREN, REYNOLDS

ENG 372 Modern Poetry. *3(3-0) S.* Defining the "modern temper" by comparison of contemporary poetry with that of the past. Reading and analysis of individual poems.
BASSETT, HALPEREN, KNOWLES, REYNOLDS

ENG 375 The Film: A Literary Medium. *3(2-2) F,S.* A survey and analysis of the development of the film into an art form with literary influences from its early days in the 1900's, through the advent of sound, to its present attainment as one of the influential media of the twentieth century.
GRIMWOOD, HARGRAVE, RUDNER

ENG 376 Science Fiction. *3(3-0) F,S.* Representative works of science fiction. Emphasis on works written in the twentieth century, with some attention to the history and development of the genre.
KESSEL, MEYERS

ENG 377 Fantasy. *3(3-0) S.* A study of representative works in the genre of Fantasy. Emphasis is placed on those works written in the nineteenth and twentieth centuries, although some attention is given to the history and development of the genre.
KESSEL, MEYERS

ENG 380 Modern Drama. *3(3-0) F.* Major plays from Ibsen to Albee.
HALPEREN, SMOOT

ENG 390 Classical Backgrounds of English Literature. *3(3-0) S.* Acquaints student with the central story-matter, classical and biblical, of the ancient Western world. Emphasis on works most influential on literature in English. All reading in English. YOUNG

ENG 391 Introduction to American Folklore. *3(3-0) S.* Principal types of folklore, combined with field work in collecting and assimilating materials from various cultural traditions. Emphasis on American folklore and its origins.
BETTS, PRIOLI

ENG 398 Contemporary Literature I (1900 to 1940). 3(3-0) F. Imaginative literature from the period 1900-1940 with emphasis upon themes and techniques rather than genre or nationality.
E. CLARK, GRIMWOOD, KNOWLES, LARYEA, REYNOLDS

ENG 399 Contemporary Literature II (1940 to Present). 3(3-0) S. Representative French, American, and British writers of the period 1940 to the present.

E. CLARK, GRIMWOOD, HARGRAVE, KNOWLES, REYNOLDS, RUDNER

ENG 400 Studies in Applied Criticism. *Preq: Senior standing, major in LTN.* 3(3-0) F. An introduction to the types and methods of literary criticism designed specifically for students intending to teach English.

ENG 439 17th Century English Literature. 3(3-0) S. Major nondramatic literary figures in England during the period 1600-1700.
HESTER, WALL, YOUNG

ENG 449 The Renaissance. 3(3-0) F. Nondramatic prose and poetry of the sixteenth century, with consideration of literary types and movements. Emphasis on the works of major authors.
BLANK, HESTER, WALL, YOUNG

ENG 451 Chaucer. 3(3-0) F,S. Introduction to the study of Chaucer through an intensive reading of *The Canterbury Tales* and *Troilus and Criseyde*.

FERSTER, HOLLEY, LOMPERIS, TOOLE

ENG 453 The Romantic Period. 3(3-0) F. Emphasis on the major poetry of Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats, with readings in Romantic prose.

HARRISON, HERNDL, D. MILLER

ENG 462 18th Century English Literature. 3(3-0) F. The major figures in English literature between 1660 and 1790 in the light of social, cultural, and religious change.

DURANT, MOORE, WYRICK

ENG 463 The Victorian Period. 3(3-0) S. Major British poets and selected prose writers studied against the social, economic, scientific, and theological background of the Victorian Period.
ENGEL, HARGRAVE, HARRISON, KING

ENG 468 American Romanticism. 3(3-0) F. Major American writers from 1825 to 1865.
BASSETT, E. CLARK, J. CLARK, MacKETHAN, PRIOLI, STEIN, WEST

ENG 469 American Realism and Naturalism. 3(3-0) S. Major American writers from 1865 to 1935.

BASSETT, E. CLARK, J. CLARK, HOLLOWAY, MacKETHAN, STEIN, WEST

ENG 486 Shakespeare, The Earlier Plays. 3(3-0) F. Shakespeare's major works before 1600 with emphasis on the development of the playwright.

BAINES, BLANK, CHAMPION, WILLIAMS

ENG 487 Shakespeare, The Later Plays. 3(3-0) S. Shakespeare's major works after 1600 with emphasis on the development of Shakespeare's tragedy and the end of his career.

BAINES, BLANK, CHAMPION, WILLIAMS

ENG 496 Seminar in Literature. *Preq: Junior standing and consent of department.* 3(3-0) F,S. Designed to provide closely supervised small-group study of a topic in literature resulting in a substantial essay or series of essays by each student on an aspect of the topic. Topics vary each semester; consult department for details.

ENG 498 Special Topics in English. *Preq: Six hours in ENG above the fr. level. 1-6 F,S.* Detailed investigation of a topic in language or literature. Topic and mode of study determined by faculty member in consultation with English department head.

ENG 499 Honors in English. *For Honors English majors only.* 3(3-0) F,S. An intensive course designed as one portion of the Honors Program in English. Subject varies.

Selected 500-Level Courses Open To Advanced Undergraduates

The prerequisite for all 500-level English courses is advanced undergraduate or graduate standing unless additional prerequisites are noted.

ENG 524 Introduction to Linguistics. 3(3-0) F.

- ENG 525 **Variety in Language.** 3(3-0) S.
 ENG 548 **Black American Literature.** 3(3-0) F.
 ENG 561 **Milton.** 3(3-0) S.
 ENG 575 **Southern Writers.** 3(3-0) S.
 ENG 578 **English Drama to 1642.** *Preqs: ENG 261.* 3(3-0) Alt. F.
 ENG 579 **Restoration and 18th-Century Drama.** 3(3-0) Alt. S.
 ENG 590 **Literary Criticism.** 3(3-0) Alt. S.

ENTOMOLOGY

- ENT 203 **An Introduction to the Honey Bee and Beekeeping.** 2(2-0) F. Provides a general introduction to honey bee biology and the fundamentals of bee management. The behavior and social system of the honey bee is stressed to expose the student to one of the animal world's most complex and highly organized nonhuman societies. AMBROSE
- ENT 301 **Introduction to Forest Insects.** *Preq: FOR 264.* 3(2-2) F. Fundamentals of morphology, classification, development, habits and control of insects attacking trees with emphasis on those injuring forests in the southeastern United States. FARRIER
- ENT 312 **Introduction to Economic Entomology.** *Preq: BS 100.* 3(2-2) F,S. A practical introduction to the science of entomology, including systematics, morphology, physiology, ecology, and management of insect and mite species of economic importance. A collection of economically important species is required. Major emphasis is on the principles of insect pest management. MOORE
- ENT(ZO) 425 **General Entomology.** *Preq: ZO 201 or equivalent.* 3(2-3) F,Sum. Explores the science of entomology by focusing on the basic principles of systematics, morphology, physiology, development, behavior, ecology, and control of insects. Field trips provide an opportunity to collect insects and study their adaptations to a wide variety of natural environments. MEYER

Selected 500-Level Courses Open To Advanced Undergraduates

- ENT 502 **Insect Diversity.** *Preq: ENT 425 or equivalent.* 4(2-4) F.
- ENT 503 **Functional Systems of Insects.** *Preqs: Twelve hours of biology, nine hours of CH, three hours of BCH, ENT 301 or equivalent.* 4(2-6) S.
- ENT(ZO) 509 **Ecology of Stream Invertebrates.** *Preqs: ZO 201 or 302, BO(ZO) 360 or equivalent.* 4(2-6) S.
- ENT 520 **Insect Pathology.** *Preqs: Introductory entomology and introductory microbiology.* 3(2-3) Alt. S.
- ENT(BO, PM, PP) 525 **Biological Control.** *Preqs: ENT 312 or 425 and PP 315 or CS 414.* 4(3-3) Alt. F.
- ENT 541 **Immature Insects.** *Preq: ENT 502 or equivalent.* 3(1-4) Alt. F.
- ENT 542 **Acarology.** *Preq: ENT 301 or 312 or ZO 201.* 3(2-3) Alt. S.
- ENT 550 **Fundamentals of Insect Control.** *Preq: ENT 312 or 301.* 3(2-2) F.
- ENT(FOR) 565 **Advanced Forest Entomology.** *Preq: ENT 301 or ENT 502 or CI.* 3(2-2) Alt. S.
- ENT(PHY, ZO) 575 **Physiology of Invertebrates.** *Preq: ZO 202 or CI.* 3(3-0) S.
- ENT(ZO) 582 **Medical and Veterinary Entomology.** *Preqs: ENT 301 or 312 and ZO 315 or equivalent.* 3(2-3) Alt. S.
- ENT 590 **Special Problems.** *Preq: CI. Credits Arranged.* F,S.

ENGINEERING OPERATIONS

EO 491 Seminar in Engineering Operations. *Preq: Sr. standing. 1(1-0) F.* Assists seniors in EO in making the transition from a college environment to that of industry through lectures, guest speakers and class discussion. Schedule during the last fall semester in residence.

EO 495 Engineering Operations Projects. *Preq: Junior or senior standing. 1-6. F,S.* Special investigations and research projects related to engineering operations.

FOREIGN LANGUAGES AND LITERATURES

(See also GRK—Greek and LAT—Latin.)

NOTE: Courses conducted in the target language, except where otherwise stated.

NOTE: Students who choose to begin language at the 101 (or 105) level are not required to take a placement test, and they will receive credit for any course successfully completed. Students with high school credit or other knowledge in French, German, Latin or Spanish are encouraged to begin their language study at a level above 101 (or 105). Before enrolling in a course above the 101 (or 105) level they must take a placement test to determine the appropriate level for their first course. Students transferring college credits should enroll at the level for which they have met the prerequisite.

Students completing with a C or better any course in which they are placed beyond the 101 (or 105) level will receive credit for prerequisite courses to a maximum of 6 hours. Students who place beyond the requirement in their curriculum and choose not to take a foreign language course will have satisfied the foreign languages requirement but will not receive hour credit.

Native speakers do not receive credit for lower division courses (100 and 200 levels) in their mother tongue.

FL 101 Elementary Language I. *Preq: Consent of coordinator. 3(3-0) F.* Self-instructional study of a foreign language, such as Chinese, not otherwise taught in the department. Admission by interview with coordinator before registering. First of a sequence of four courses.

FL 102 Elementary Language II. *Preq: Consent of coordinator. 3(3-0) S.* Self-instructional study of a foreign language, such as Chinese, not otherwise taught in the department. Admission by interview with coordinator before registering. Second of a sequence of four courses.

FL 201 Intermediate Language I. *Preq: Consent of coordinator. 3(3-0) F.* Self-instructional study of a foreign language, such as Chinese, not otherwise taught in the department. Admission by interview with coordinator before registering. Third of a sequence of four courses.

FL 202 Intermediate Language II. *Preq: Consent of coordinator. 3(3-0) S.* Self-instructional study of a foreign language, such as Chinese, not otherwise taught in the department. Admission by interview with coordinator before registering. Fourth of a sequence of four courses.

FL 260 Linguistics for Teachers of Second Languages. *3(3-0) S.* Introduction to scientific study of language, specially adapted to the needs of language teachers. Emphasis on structure of language (phonology, morphology, syntax, and semantics), and contrasting language structures. Treatment of animal language, first and second language acquisition, language change and variation, linguistic pluralism, and the universals of language.

FL 295 Special Topics in Foreign Languages and/or Literatures. *Preq: Consent of department. 3(3-0).* A special projects course on topics to be determined as needed in the departmental program.

FL 298 Independent Study in Foreign Language and/or Literature. *Preq: Consent of department. 1-3 F,S.* Individualized study in foreign language and/or literature. Topic, mode of study and credit hours to be determined in consultation with the faculty member supervising the work.

FL 350 Modern European Literary Criticism. *Preq: 6 hours of any 300 level literature courses. 3(3-0).* Study of theoretical and philosophical foundations and applied methods in major currents of modern European literary criticism. Includes structuralism, post-structuralism, feminism, and psychoanalytical and ideological criticism. Examination of critical works and application to literary texts. Course taught in English.

FL 495 Special Topics in Foreign Languages and Literatures. *Preq: Consent of department. 3(3-0).* A concentrated study of a special period, author or genre to be determined as needed in the departmental program.

FL 498 Independent Study in Foreign Language and Literature. *Preq: Consent of department. 1-6 F,S, Sum.* Individualized study of a foreign language or literature. Topic, mode of study, and credit hours to be determined in consultation with the faculty member supervising work.

ENGLISH FOR FOREIGN STUDENTS

NOTE: Undergraduate students in the following schools do not receive free elective credit for the successful completion of Foreign Language English courses, (FLE 101, 102, 103, 104): School of Design, School of Education, School of Engineering, School of Physical and Mathematical Science, and School of Textiles. Credits for the FLE courses received by students in those schools will be recorded on grade reports and transcripts and will be used in GPA calculations, but these credits will not count as part of the hours required for graduation. Students in the School of Agriculture and Life Sciences, the School of Forest Resources, and the School of Humanities and Social Sciences receive free elective credit towards graduation for successful completion of any of the FLE courses.

FLE 101 Foreign Language English: Grammar Review. *Preq: Scores between 500 and 575 on the TOEFL Test; Coreq: Michigan Test of English Language Proficiency and Michigan Test of Aural Comprehension. Open only to non-native speakers of English. 3(3-0) F,S.* Review of English grammar with emphasis on word order patterns, idioms, and function words of spoken American English; oral drill on statement and question patterns in all tenses; and practice in constructing original patterns. Language laboratory practice required.

FLE 102 Foreign Language English: Writing. *Preq: Scores between 500 and 575 on the TOEFL Test; Coreq: Michigan Test of English Language Proficiency and Michigan Test of Aural Comprehension. Open only to non-native speakers of English. 3(3-0) F,S.* Practice in writing sentences, paragraphs, summaries, outlines, and compositions. Drills on mechanics: spelling, punctuation, capitalization, and apostrophes. Exercises on use of transitional words, quotation and subordination to indicate relationships. Analysis and imitation of well-written paragraphs to learn logical organization, coherence, and unity. Formal compositions written in class and informal journals written outside class.

FLE 103 Foreign Language English: Oral English. *Preq: Scores between 500 and 575 on the TOEFL Test; Coreq: Michigan Test of English Language Proficiency and Michigan Test of Aural Comprehension. Open only to non-native speakers of English. 3(3-0) F,S.* Designed for students who need additional oral English practice in order to comprehend spoken English and be understood by native speakers. Emphasis on correct pronunciation and intonation and the use of colloquial expressions and speech patterns. Aural comprehension exercises, oral drills to practice idiomatic English and functional (survival) vocabulary, role playing, class discussions, films, and language laboratory practice.

FLE 104 Foreign Language English: Reading Improvement. *Preq: Scores between 500 and 575 on the TOEFL Test; Coreq: Michigan Test of English Language Proficiency and Michigan Test of Aural Comprehension. Open only to non-native speakers of English. 1(0-3)*

S. Designed for students who need to improve reading speed and comprehension in order to read efficiently in other courses. Concept of class as a reading lab with timed drills and materials to give students practice in responding rapidly and accurately to increasingly longer units of reading matter. Technique of scanning, dictionary and vocabulary-building exercises.

FLE 402 Thesis and Dissertation Writing for Foreign Students. *Not open to undergraduates; credit is not applicable to any graduate degree programs. 3(3-0) F,S.* Assists foreign students whose native language is not English and who are in the process of preparing graduate theses and dissertations to organize and express their ideas and research findings in a clear and effective manner.

FRENCH LANGUAGE AND LITERATURE

FLF 101 Elementary French I. *3(3-0) F,S,Sum.* First in a four-course sequence to develop language skills. Oral and written practice in classroom and language laboratory. Readings in French culture and civilization.

FLF 102 Elementary French II. *Preq: FLF 101. 3(3-0) F,S,Sum.* Continuation of FLF 101 with intensive practice in spoken French. Readings in French culture and civilization.

FLF 103 Elementary French I Conversation. *Coreq: FLF 101. 1(1-0) F,S,Sum.* Supplements conversational practice in FLF 101. Students are encouraged to use their speaking skills in a variety of situations. Special attention is given to correcting and improving pronunciation and intonation.

FLF 104 Elementary French II Conversation. *Coreq: FLF 102. 1(1-0) F,S,Sum.* Supplements conversational practice in FLF 102. Students are encouraged to use their speaking skills in a variety of situations. Special attention is given to correcting and improving pronunciation and intonation.

FLF 105 Intensive Elementary French. *6(6-0) F.* An intensive course for developing language skills. Oral and written practice in classroom and language laboratory. Same as FLF 101 and FLF 102.

FLF 201 Intermediate French I. *Preq: FLF 102. 3(3-0) F,S,Sum.* Third of four consecutive courses to develop skills of speaking, listening, reading and writing. Readings and discussions of French culture, civilization and literature.

FLF 202 Intermediate French II. *Preq: FLF 201. 3(3-0) F,S,Sum.* Last for four sequential language courses. Increased emphasis on reading and writing. Readings in the literature, culture, and civilization of France and the francophone world.

FLF 203 French Conversation. *Preq: FLF 102 or 105. 1(1-0) F,S.* Practice in spoken French, emphasizing active use of the language in a variety of situations. The student is encouraged to increase vocabulary, while developing greater fluency and ease in the structural patterns of the language. May be repeated to a maximum of three credit hours.

FLF 205 Intensive Intermediate French. *Preq: FLF 102 or 105. 6(6-0) S.* An intensive study of French on the intermediate level with increased emphasis on reading and writing skills. Oral and written practice in classroom and language laboratory. Same as FLF 201 plus 202.

FLF 301 Survey of French Literature to 1800. *Preq: Any of the following: FLF 308, 310, 311 or 315. 3(3-0) F.* Literature of the French Middle Ages, French Renaissance, Classicism and Enlightenment; special attention to genre development. Readings of representative works with analytical and critical emphasis.

FLF 302 Survey of French Literature Since 1800. *Preq: Any of the following: FLF 301, 308, 310, 311, 315. 3(3-0) S.* French Romanticism, Realism, Symbolism, Surrealism, Existentialism, and modern literary experimentation. Readings of representative works with analytical and critical emphasis.

FLF 307 Technical and Commercial French. *Preq: FLF 202. 3(3-0) F.* Conversational and written French with emphasis on technical and commercial materials.

FLF 308 French Conversation and Reading. *Preq: FLF 202. 3(3-0) S.* Intensive practice in speaking and reading French. Thorough drills and conversation emphasizing practical language and idiomatic expressions.

FLF 309 French Phonetics and Pronunciation. *Preq: FLF 202 or 205. 3(3-0) F.* A study of the production of the sounds of Standard French with the aim of improving pronunciation and fluency. Extensive oral practice in major problem areas.

FLF 310 French Syntax and Composition. *Preq: FLF 202 or 205. 3(3-0) S.* A thorough study of the more advanced aspects of the grammar of the French language, with extensive practice in writing.

FLF 311 Methods and Techniques in French Translation. *Preq: FLF 202 or 205. 3(3-0) F, Alt. yrs.* Methods and techniques in translation with an emphasis on writing skills.

FLF 315 French Civilization and Culture. *Preq: FLF 202 or 205. 3(3-0) S, Alt. yrs.* Taught in French. This course provides a background in French civilization and culture, through reading, discussion and presentation of the social, economic and political structures of France, along with its geography, history, music and art.

FLF 316 French Lyric Poetry. *Preq: FLF 202 or FLF 205. 3(3-0) S, Every 3rd yr.* A study of the development of the French lyric genre from the origins to the present, including the rules and practices of French versification.

FLF 323 Contemporary French Novel. *Preq: FLF 202 or FLF 205. 3(3-0) F, Every 3rd yr.* The course is a survey of the 20th century French novel. Works of Gide, Proust, Mauriac, Malraux, Sartre and Camus will be included with representative novels of surrealism, existentialism, and the new novel.

FLF 324 Contemporary French Theater. *Preq: FLF 202 or 205. 3(3-0) F, Every 3rd yr.* Representative playwrights of twentieth-century France, including Giraudoux, Anouilh, Sartre, Beckett, Ionesco, and Genet.

FLF 352 Francophone Culture of West Africa and the Caribbean. *Preq: FLF 202. 3(3-0) S, Alt. yrs.* Literary and cultural traditions of French-speaking West Africa and the Caribbean. Taught in French.

FLF 414 Masterpieces of French Prose. *Preq: FLF 202 or 205. 3(3-0) F, Every 3rd yr.* Important developments in French prose from the Renaissance to 1900.

FLF 415 French Theater Before 1900. *Preq: FLF 202 or 205. 3(3-0) S, Every 3rd yr.* Reading and discussion of representative French plays, including a study of the tragedy, comedy, farce, and drama. Authors include Corneille, Racine, Moliere, Lesage, Marivaux, Sedaine, Beaumarchais and Musset.

FLF 492 Seminar in French Studies. *Preq: Junior standing and consent of department. 3(3-0) S, Alt. yrs.* A small-group study of a topic in literature resulting in a substantial essay or series of essays by each student on an aspect of the topic. Topics vary each semester.

GRADUATE CERTIFICATION ONLY

FLF 401 French for Graduate Students. *Preq: Graduate standing. Not open to undergraduates. 3(3-0) F.* Basic French grammar, with special attention to characteristics of formal expository style, and illustrative readings. Study of extracts from scholarly publications in the students' areas of research. Graduate language certification granted on satisfactory completion of the course.

GERMAN LANGUAGE AND LITERATURE

FLG 101 Elementary German I. *3(3-0) F,S,Sum.* The first in a four-course sequence intended to teach the student to understand, speak, read and write everyday German. Emphasis on speaking and understanding with additional reading of cultural materials. Intensive practice in the language lab.

FLG 102 Elementary German II. *Preq: FLG 101. 3(3-0) F,S,Sum.* Strong emphasis continued on understanding and speaking German, but increasing attention to syntax, vocabulary building, and awareness of cultural heritage of the German-speaking countries.

FLG 103 Elementary German I Conversation. *Coreq: FLG 101. 1(1-0) F,S,Sum.* Supplements conversational practice in FLG 101. Students are encouraged to use their speaking skills in a variety of situations. Special attention is given to correcting and improving pronunciation and intonation.

FLG 104 Elementary German II Conversation. *Coreq: FLG 102. 1(1-0) F,S,Sum.* Supplements conversational practice in FLG 102. Students are encouraged to use their speaking skills in a variety of situations. Special attention is given to correcting and improving pronunciation and intonation.

FLG 201 Intermediate German I. *Preq: FLG 102. 3(3-0) F,S.* The third of four consecutive courses in German. Intensive conversational drill to build the students' ability to understand and speak everyday German. Supplementary readings in German literature and culture.

FLG 202 Intermediate German II. *Preq: FLG 201. 3(3-0) S.* Last of four sequential courses in German. Continued use of everyday spoken German but greater emphasis on reading and writing. Additional readings in German literature and culture.

FLG 307 Technical and Commercial German. *Preq: FLG 202. 3(3-0) F.* Conversational and written German with emphasis on technical and commercial materials.

FLG 309 Advanced German Conversation and Phonetics. *Preq: FLG 202. 3(3-0) S, Alt. yrs.* Intensive conversational practice in class and language laboratory based on current topics, and a study of sound production and linguistic terminology. Discussions of German culture and civilization. Attention to cultural factors essential to effective communication. Oral report by students.

FLG 310 Advanced German Syntax and Composition. *Preq: FLG 202. 3(3-0) S, Alt. yrs.* A study of advanced points in German syntax not normally studied in depth during the two years of beginning and intermediate courses. Students write controlled exercises and assigned and free compositions. Includes a bibliographical practicum.

FLG 316 German Lyric Poetry. *Preq: FLG 202. 3(3-0) F, Every 3rd yr.* A historical and interpretative study of the German lyric from the fifteenth into the twentieth century with special attention to the poet's choice of theme, the ways in which that theme is treated, and the relevance of the poem to human experience.

FLG 323 Twentieth Century German Literature. *Preq: FLG 202. 3(3-0) F, Every 3rd yr.* A study of twentieth century literature from the German-speaking countries. Authors include Mann, Kafka, Rilke, Brecht, Hesse, Durrenmatt, Frisch, Grass, and a variety of poets.

GRADUATE CERTIFICATION ONLY

FLG 401 German for Graduate Students. *Preq: Graduate standing; Not open to undergraduates. 3(3-0) F.* Basic German grammar, with special attention to characteristics of formal expository style, and illustrative readings. Study of extracts from scholarly publications in the students' areas of research. Graduate language certification granted on satisfactory completion of the course.

HEBREW LANGUAGE AND LITERATURE

FLH (REL) 101 Elementary Biblical Hebrew I. *3(3-0) F. Alt. yrs. (See Religion.)*

FLH (REL) 102 Elementary Biblical Hebrew II. *Preq: REL (FLH) 101. 3(3-0) S. Alt. yrs. (See Religion.)*

FLH (REL) 201 Intermediate Biblical Hebrew I. *Preq: REL (FLH) 102. 3(3-0) F. Alt. yrs. (See Religion.)*

ITALIAN LANGUAGE AND LITERATURE

FLI 101 Elementary Italian I. *3(3-0) F.* Begins the development of a balanced foundation in all four language skills. Concentrates on listening and speaking, emphasizing idiomatic Italian. Short readings in Italian culture and civilization. Class and laboratory practices, written homework.

FLI 102 Elementary Italian II. *Preq: FLI 101. 3(3-0) S.* Continuation of FLI 101 with emphasis on acquisition of oral skills through class practice and use of audio aids. Readings in Italian culture, civilization and literature.

FLI 103 Elementary Italian I Conversation. *Coreq: FLI 101. 1(1-0) F,S.* Supplements conversational practice in FLI 101. Students are encouraged to use their speaking skills in a variety of situations. Special attention is given to correcting and improving pronunciation and intonation.

FLI 201 Intermediate Italian I. *Preq: FLI 102. 3(3-0) F.* The third of four consecutive courses to build skills in reading, writing, and speaking Italian. Conversational practice, written exercises, and supplementary readings in Italian literature.

FLI 202 Intermediate Italian II. *Preq: FLI 201. 3(3-0) S.* Continued use of spoken Italian with a greater emphasis on reading and writing.

FLI 203 Italian Conversation. *Preq: FLI 101. 1(1-0) F,S.* Practice in spoken Italian. Students are required to use the language in a variety of situations and are encouraged to acquire a wide range of practical words and expressions suitable for business or travel purposes. The course may be repeated to a maximum of three times for credit.

FLI 308 Italian Reading and Conversation. *Preq: FLI 201. 3(3-0) F.* Advanced readings and intensive conversational practice in Italian for students beyond the intermediate level.

JAPANESE LANGUAGE AND LITERATURE

FLJ 101 Elementary Japanese I. *3(3-0) F.* Introduction to standard, formal Japanese. Emphasis is on speaking and listening skills. Exposure to Japanese culture, reading, and writing.

FLJ 102 Elementary Japanese II. *Preq: FLJ 101. 3(3-0) S.* Continuation of basic skills. Emphasis on speaking and listening skills; inclusion of Japanese cultural factors in communication. Some reading and writing.

FLJ 103 Elementary Japanese I Conversation. *Coreq: FLJ 101. 1(1-0) F.* Supplements conversational practice in FLJ 101. Students are encouraged to use their speaking skills in a variety of situations. Special attention is given to correcting and improving pronunciation and intonation.

FLJ 104 Elementary Japanese II Conversation. *Preq: FLJ 101; Coreq: FLJ 102. 1(1-0) S.* Supplements conversational practice in FLJ 102. Students are encouraged to use their speaking skills in a variety of situations. Special attention is given to correcting and improving pronunciation and intonation.

FLJ 105 Intensive Elementary Japanese. *6(6-0) F.* An intensive introduction to standard, formal Japanese. Emphasis is on speaking and listening skills. Some reading and writing. Combines FLJ 101 and 102.

FLJ 201 Intermediate Japanese I. *Preq: FLJ 102 or FLJ 105. 3(3-0) F.* Continuation of basic skills. Greater emphasis on reading and writing. More exposure to Japanese cultural traditions.

FLJ 202 Intermediate Japanese II. *Preq: FLJ 201. 3(3-0) S.* Continuation of the learning of the basic skills. Emphasis on reading and writing as well as on spoken Japanese and on cultural patterns of behavior.

FLJ 203 Intermediate Japanese Conversation. *Preq: FLJ 102; Coreq: FLJ 201, FLJ 202 or FLJ 301. May be repeated to a maximum of three credit hours. 1(1-0) F,S.* Practice in spoken Japanese through use of the language in a variety of situations. Increase vocabulary and develop fluency and ease in the structural patterns of the language.

FLJ 205 Intensive Intermediate Japanese. *Preq: FLJ 105 or FLJ 102. 6(6-0) S.* An intensive study of standard, formal Japanese on the intermediate level with increased emphasis on reading and writing.

FLJ 301 Intermediate Japanese III. *Preq: FLJ 202 or FLJ 205. 3(3-0) F.* Last of the foundation courses in Japanese. Continued use of spoken Japanese but greater emphasis on reading and writing, including further exposure to cultural traditions.

FLJ 302 Intermediate Japanese IV. *Preq: FLJ 301. 3(3-0) S.* Review of basic grammar and preparation for advanced reading and composition. Some advanced conversation, with attention to cultural values.

FLJ 401 Advanced Japanese I. *Preq: FLJ 302. 3(3-0) F.* A thorough review of the more advanced aspects of the grammar of the Japanese language, with extensive practice in reading and writing and further sensitization to Japanese cultural values.

FLJ 402 Advanced Japanese II. *Preq: FLJ 401. 3(3-0) S.* Elaboration on grammatical forms learned in the previous courses with applications in reading and writing, combined with more sophisticated vocabulary and idioms and attention to cultural background and tradition.

FLJ 411 Readings in Modern Japanese I. *Preq: FLJ 402. 3(3-0) F.* Reading of selected articles in modern Japanese chosen from a list by the students to reflect their individual interests. Readings encompassing a broad range of issues in Japanese culture and society. Emphasis on both accurate comprehension of content and retention of the most frequently encountered Chinese characters (*kanji*).

FLJ 412 Readings in Modern Japanese II. *Preq: FLJ 411. 3(3-0) S.* Readings of selected articles in modern Japanese which reflect current issues in Japanese society and culture. Includes newspapers and both popular and specialized magazines. Emphasis on literary and journalistic idioms as well as characters.

PORTUGUESE LANGUAGE AND LITERATURE

FLP 101 (FL 101P) Elementary Portuguese I. *3(3-0) F.* Introduction to the fundamentals of Brazilian Portuguese: pronunciation, comprehension, and spoken syntax and grammar.

FLP 102 (FL 102P) Elementary Portuguese II. *Preq: FLP 101. 3(3-0) S.* Continuation of the essentials of Brazilian Portuguese. Further stress on pronunciation and comprehension and introduction of reading and writing skills.

RUSSIAN LANGUAGE AND LITERATURE

FLR 101 Elementary Russian I. *3(3-0) F.* First in a four-course sequence to develop language skills in Russian. Oral and written practice in classroom and language laboratory and attention to Russian cultural heritage.

FLR 102 Elementary Russian II. *Preq: FLR 101. 3(3-0) S.* Emphasis on acquisition of basic oral skills, with complementary reading and writing exercises and attention to Russian cultural heritage.

FLR 201 Intermediate Russian I. *Preq: FLR 102. 3(3-0) F.* Learning of basic Russian language skills is continued. More emphasis given to writing and essential conversational practice. Intermediate level readings in Russian literature and culture. Class and laboratory practice; written assignments.

FLR 202 Intermediate Russian II. *Preq: FLR 201. 3(3-0) S.* Study of more advanced aspects of Russian syntax through reading of prose of Russian writers. Continued attention to conversational practice and vocabulary building.

FLR 303 Russian Literature in Translation: The Nineteenth Century. *3(3-0) S, Alt. yrs.* A study of selected plays, short stories and novels of the great Russian writers of the nineteenth century: Pushkin, Lermontov, Gogol, Goncharov, Turgenev, Dostoevsky, Saltykov-Shchedrin, Leskov, Tolstoy and Chekhov. Examines the peculiarly Russian as well as the universal aspects of this literature. All readings, lectures and discussions in English.

FLR 304 Russian Literature in Translation: The Twentieth Century. *3(3-0) S, Alt. yrs.* A study of selected poems, plays, short stories and novels by major Russian writers of the twentieth century, such as Chekhov, Gorky, Blok, Mayakovsky, Esenin, Zamyatin, Olesha, Bulgakov, Babel, Pilnyak, Pasternak, Solzhenitsyn, Evtushenko, and Voznesensky. All readings, lectures and discussions in English.

SPANISH LANGUAGE AND LITERATURE

FLS 101 Elementary Spanish I. *3(3-0) F,S,Sum.* Concentrates on listening and speaking, and begins the development of a balanced foundation in all Spanish language skills. Idiomatic, everyday Spanish and cultural awareness are emphasized. Class practice, laboratory and written homework.

FLS 102 Elementary Spanish II. *Preq: FLS 101. 3(3-0) F,S,Sum.* Expands use of Spanish through past tenses, regular and irregular, and various morphological and syntactical aspects. Emphasis on oral skills and increased cultural awareness. Written work and laboratory practice assigned daily.

FLS 103 Elementary Spanish I Conversation . *Coreq: FLS 101. 1(1-0) F,S,Sum.* Supplements conversational practice in FLS 101. Students are encouraged to use their speaking skills in a variety of situations. Special attention is given to correcting and improving pronunciation and intonation.

FLS 104 Elementary Spanish II Conversation. *Coreq: FLS 102. 1(1-0) F,S,Sum.* Supplements conversational practice in FLS 102. Students are encouraged to use their speaking skills in a variety of situations. Special attention is given to correcting and improving pronunciation and intonation.

FLS 105 Intensive Elementary Spanish. *6(6-0) F.* An intensive introduction to idiomatic Spanish concentrating on developing a balanced foundation in listening, speaking, reading and writing. Class practice, laboratory and written assignments. Same as FLS 101 plus 102.

FLS 201 Intermediate Spanish I. *Preq: FLS 102 or 105. 3(3-0) F,S,Sum.* The third of four consecutive Spanish courses. As with 101 and 102, its aim is mainly to teach idiomatic, spoken Spanish. Reading and writing skills receive greater attention than previously, as does the cultural heritage of the Spanish-speaking peoples. Class practice, laboratory and written assignments.

FLS 202 Intermediate Spanish II. *Preq: FLS 201. 3(3-0) F,S,Sum.* Last of four sequential courses, completing the learning of the foundations of the Spanish language. Writing receives greater attention, as well as the cultural heritage of Spanish-speaking peoples.

FLS 203 Spanish Conversation. *Preq: FLS 102 or 105. 1(1-0) F,S,Sum.* Practice in spoken Spanish. Students required to use the language actively in a variety of situations and encouraged to acquire a wide range of immediately practical words and expressions suitable for business or travel purposes. This course may be taken a maximum of three times for credit.

- FLS 205 Intensive Intermediate Spanish.** *Preqs: FLS 102 or 105. 6(6-0) S.* An intensive study of idiomatic Spanish on the intermediate level with increased emphasis on reading and writing skills. Class practice, laboratory and written assignments. Same as FLS 201 plus 202.
- FLS 301 Survey of Spanish Literature Through Golden Age.** *Preq: FLS 202. 3(3-0) F.* Literature of Spain and Spanish America from the Middle Ages to the beginning of the eighteenth century.
- FLS 302 Survey of Spanish Literature: 1700 to Present.** *Preq: FLS 202 or 205. 3(3-0) S.* Introduction to Spanish Neoclassicism, Romanticism, Realism, and subsequent literary production. Special attention to the quest for new values in contemporary literature.
- FLS 304 Modern Latin American Literature.** *Preq: FLS 202 or 205. 3(3-0) S, Alt. yrs.* A survey of modern Latin American Literature from *Modernismo* to the present.
- FLS 307 Business Spanish.** *Preq: FLS 202. 3(3-0) F.* Business Spanish terminology, vocabulary and practices. Emphasis on everyday spoken and written Spanish. Readings and discussions of international topics. Cross-cultural considerations relative to international business operations, including exporting and banking.
- FLS 308 Spanish Conversation and Reading.** *Preq: FLS 202. 3(3-0) S.* Intensive practice in speaking and reading Spanish. Thorough drills and conversation emphasizing practical language and idiomatic expressions.
- FLS 309 Spanish Phonetics and Advanced Conversation.** *Preq: FLS 202 or 205. 3(3-0) F.* The production of the sounds of Standard Spanish with the aim of improving pronunciation, fluency, and skill in communication. Extensive oral practice in phonetics and conversation.
- FLS 310 Advanced Spanish Grammar.** *Preq: FLS 202 or 205. 3(3-0) S.* Advanced aspects of Spanish grammar, with extensive practice in writing. Lectures, discussions and compositions incorporate topics relevant to Hispanic culture and civilization.
- FLS 311 Advanced Spanish Composition.** *Preq: FLS 202. 3(3-0) F.* An intensive course in the theory and practice of Spanish composition. Lectures, discussions and weekly writing assignments are required.
- FLS 315 Culture and Civilization of the Iberian Peninsula.** *Preq: FLS 202. 3(3-0) F.* The Iberian Peninsula as a crossroads of civilizations from neolithic times to the present. The emergence of Spain and Portugal as nations, the rise and fall of their overseas empires, and their contemporary civilization.
- FLS 316 The Culture and Civilization of Latin America.** *Preq: FLS 202. 3(3-0) S.* Survey of the cultural traditions of Latin America including Brazil. The major pre-Columbian civilizations, Spanish and Portuguese colonialism, the emergence of the modern nations. Films and recordings supplement readings and discussions.
- FLS 323 Contemporary Spanish Literature.** *Preq: FLS 202 or 205. 3(3-0) S, Alt. yrs.* An in-depth study of selected works of Spanish fiction, essay and poetry in the twentieth century. Special attention is given to the Generations of 1898 and 1927 and to post-Civil War writers.
- FLS 400 Methods and Techniques in Spanish Translation and Interpretation.** *Preq: FLS 202 or 205. 3(3-0) S, Alt. yrs.* A concentrated study in the theory, methods and techniques of translation and interpretation based on materials relevant to various fields and professions.
- FLS 403 Spanish Prose Fiction to 1900.** *Preq: Consent of department. 3(3-0) F, Alt. yrs.* A study of the development of the Spanish novel and short story from *La celestina* through the novels of Galdos. Major emphasis is given to the picaresque novel, *Don Quixote*, eighteenth-century didactic prose, and nineteenth-century Realism.
- FLS 404 Spanish Drama.** *Preq: Consent of department. 3(3-0) F, Alt. yrs.* Explores the history and development of Spanish drama from its beginning to the present. Special emphasis on Golden Age and contemporary theater.

FLS 492 Seminar in Hispanic Studies. *Preq: Junior standing and consent of department. 3(3-0) S.* A small-group study of a topic in literature resulting in a substantial essay or series of essays by each student on an aspect of the topic. Topics vary.

GRADUATE CERTIFICATION ONLY

FLS 401 Spanish for Graduate Students. *Preq: Graduate standing; not open to undergraduates. 3(3-0) F.* Basic Spanish grammar, with special attention to characteristics of formal expository style, and illustrative readings. Study of extracts from scholarly publications in the students' areas of research. Graduate language certification granted on satisfactory completion of the course.

FORESTRY

FOR 110 Introduction to Forestry Concepts and Measurements. *3(2-3) F.* Overview of multiple use forestry; history, policy, practice, protection, national planning, and forestry careers. Theory, principles and techniques of instrumentation relative to the collection and presentation of forest data. **COOPER**

FOR 111 Introduction to Field Forestry. *Open only to students transferring to a forestry major. 2(1-2) Sum.* Techniques of instrumentation relative to the collection and presentation of forest data. Introduction to dendrology.

FOR 204 Silviculture. *2(0-6) Summer Camp.* Field exercises to enable the student to describe and measure factors of the forest environment, the ecology of forest communities, stand structure and growth, and tree and stand response to treatments which are normal parts of forest management operations. **JERVIS**

FOR 212 Dendrology. *Preq: BO 200. 4(2-4) F.* Identification and basic biology of Eastern woody plants with studies of their classification, characteristics, and habitats. Consideration of important Northern and Western trees. Laboratories stress field identification and consist of trips to natural forest communities. **BRAHAM**

FOR 252 Introduction to Forest Science. *Not open to forestry majors. 3(2-3) S.* Integration of biological principles into studies of tree growth, reproduction, establishment, survival, and disturbance. Discussions of regional silviculture, and of effects of humans on forest ecosystems. Instruction in forest sampling and tree identification. Many laboratories meet outdoors. **BRAHAM**

FOR 261 Forest Biology. *Preqs: ENG 112, MA 114, BO 200 or equivalents, FOR 110, FOR 262 (for transfers, FOR 111). 2(0-6) Summer camp.* Biology of forest communities. Emphasis on successional trends in forest communities, identifying plants that typify each community, site conditions where the community occurs, and spatial arrangement of trees within the community. Includes the North Carolina Coastal Plain, Piedmont, and Mountains, and several overnight field trips. **BRAHAM**

FOR 264 Forest Protection. *Preq: Jr. standing in FOR. 2(0-6) Summer camp.* Identification and control of forest insects. Behavior of fire and the meteorological factors affecting fire behavior. Suppression of a large simulated fire, including use of ground equipment, aircraft and communications systems. **FARRIER, GREGORY**

FOR 272 Biometry. *Preqs: FOR 110, MA 113. 3(2-3) F,S.* Scientific basis for the measurement and estimation required in the management of forest resources and the goods and services derived from forest land. Included are theory of measurements, procedures required, instrumentation, and statistical description and presentation of results. **STEENSEN**

FOR (WPS) 273 Quantitative Methods in Forest Resources. *Preq: Soph. standing. 3(2-2) F,S.* Problem solving techniques using computers in the areas of forestry, wood technology, pulp and paper technology and recreation resources. Historical development of past techniques and tools, assessment of present technology, and an evaluation of problem solving tools, including an introduction to computer programming. **KIRKMAN, ROISE**

FOR 274 Mapping and Mensuration. *Preq: MA 114; FOR 110 and FOR 212, or FOR 111 (transfer students). 3(0-9) Summer camp.* Use of surveying instruments and graphic methods in preparation of topographic and planimetric maps of forested areas. Collection and manipulation of timber volume data on fixed and variable plot cruises and the writing of an inventory report.
STEENSEN

FOR 303 Silvics and Forest Ecology. *Preqs: Summer camp. 4(3-3) F.* Integration of the knowledge from previous courses taken at summer camp and in biology, physics, and chemistry and development of the theoretical basis of manipulating forest ecosystems for the benefit of man. Physiologic, genetic and ecological bases for management of forest ecosystems.
PERRY

FOR 304 Theory of Silviculture. *Preq: FOR 303. 4(3-3) Summer camp.* Theory and practices involved in natural and artificial forest stand regeneration including: species growth and silvical characteristics; soil/site relationships; site evaluation; insect and disease considerations; methods insuring desired species composition, yields and economics; diagnosis and prescription of intermediate stand treatments and harvesting methods; seedling production systems and tree improvement. Integration of other objectives with timber production.
FREDERICK

FOR (FW) 310 Fisheries and Wildlife Inventory and Management. *Preqs: FW (ZO) 353 or FW (ZO) 420; junior or senior standing. 6(0-18) Summer camp.* (See Fisheries and Wildlife Sciences.)

FOR (PP) 318 Forest Pathology. *Preq: BS 100 or equivalent. 4(3-2) S.* (See Plant Pathology.)

FOR 319 Forestry Economics. *Preq: EB 212, Summer camp. 3(3-0) F.* Analysis of forestry as an economic enterprise on private and public lands. Topics include: evaluation of growing timber as long-term capital investment; forest taxation; timber markets; and the role of multiple-use considerations in decision making.
HOLLEY

FOR 320 Forest Fire Management. *Preq: FOR 264. 3(3-0) S.* Concepts of forest fire management. Use of prescribed fire, use of the National Fire Danger Rating System, smoke prediction and management, fuels inventory and management, and fire weather forecast interpretation. One or two day-long trips may be taken.

FOR 353 Air Photo Interpretation and Photogrammetry. *Preq: Jr. standing. 3(2-3) F.* Theory, principles, and techniques of utilizing air photos for: 1) inventory and management of renewable resources; 2) photogrammetric and engineering applications; 3) hydrologic/terrain analysis; and 4) land use/cover mapping. Introduction to remote sensing and use of U-2 color infrared, thermal, Skylab, and Landsat imagery in resource mapping.
KHORRAM

FOR (MEA, PM) 386 Agricultural and Forest Meteorology. *Preq: PY 211. 3(3-0) F.* (See Marine, Earth and Atmospheric Sciences.)

FOR 401 Forest Hydrology and Watershed Management. *Preq: SSC 200. Not recommended for students below senior classification, non-forestry majors should contact the instructor prior to start of class. 4(3-3) F.* The hydrologic and energy cycles and the effects of forest and associated wildland vegetation on elements of those cycles. Water movement through forest ecosystems. Effects of forestry practices on water yield, soil conservation, and water quality. Principles of watershed management for single or multiple use.
GREGORY

FOR (FW) 404 Forest Wildlife Management. *Preqs: BS 100 or equiv. plus 8 hours of biological sciences; advanced undergraduate or graduate student. 3(3-0) S.* (See Fisheries and Wildlife Sciences.)

FOR 405 Forest Management. *Preqs: FOR 304, 319, ST 312, Summer camp. 4(2-4) F.* Fundamental principles and analytical techniques necessary in the planning, management and optimization of forest operations, formulation of objectives and constraints, yield forecasting, forest regulation, procurement, and marketing, inventory methods, and management plant preparation. Written and oral reporting are integral components of this course.
SMITH

FOR 406 Forest Inventory, Analysis and Planning. *Preqs: FOR 405, FOR 353, FOR 273, Summer camp; ST 312. 4(0-16) S.* Independent field work in forest inventory, analysis, and planning. Students design and implement a timber and nontimber inventory, analyze stand conditions and growth, and prepare a long term management plan considering management objectives subject to economic, social, and ecological constraints. Includes several field trips to public and private forestry operations which may include overnight travel. **BLANK, SMITH**

FOR 411 Forest Tree Improvement. *Preq: Junior or senior standing in forestry. 3(3-0) S.* Tree improvement as it is applied in production forestry for both conifers and hardwoods. The variation, evolution, and genetics of forest trees. Methods for selection, breeding, seed production, and vegetative propagation. Studies of exotics, wood properties, and tree improvement as a forest management tool. **ZOBEL**

FOR 412 Forest Types of the Southeast. *Preq: FOR 212. Preference given to forestry seniors. 2(1-3) S.* The principal forest types of the southeastern Atlantic States with discussion of successional shrub communities. Emphasis on characteristic woody species, special arrangement of trees, and site quality. Teaching accomplished largely by means of all-day field trips on Saturdays to representative types. One overnight trip is required. **BRAHAM**

FOR 422 Consulting Forestry. *Preq: Senior standing in forestry. 3(3-0) F.* Typical activities on private woodlands from the viewpoint of the professional forester providing consulting services. Includes "consulting" services provided by forest industry, the state, and agricultural extension; but the focus is on independent consultants. Extensive use of practicing consultants as guest lecturers. Topics include: cruising and selling timber, taxation, investment analysis, ethics. Field project in alternative cruising methods. **HOLLEY**

FOR (WPS) 423 Mechanization of Silvicultural Operations. *Preq: Junior standing, MA 113, MA 114, PY 221. 3(2-3) F.* Machinery used in the forest industries for wood extraction, regeneration, nursery operations, cone harvesting and processing, and fire control. Power sources; machine operation; testing, rating and capabilities of forest machinery; deck and road layouts; cost analysis and systems selection. **HASSAN**

FOR (WPS) 434 Quantitative Methods of Decision Making in Forest Products. *Preqs: FOR (WPS) 273 and MA 113 and 114. 3(3-0) F.* Management science techniques and applications in forest industry. Linear programming, simulation, decision theory and inventory theory. Techniques to solve decision making problems typically encountered. **ROISE**

FOR 472 Renewable Resource Policy and Management. *Preq: Junior standing. 4(3-3) S.* A legal-institutional approach to renewable resource management. Historic legal principles, constitutional provisions, location and organization of concerned agencies. Illustration of policy and principles through analysis of current issues and case studies. Examples from water resource development, coastal zone management, national forest and park policy, and implementation of the National Environmental Policy Act are used. **ADAMS**

FOR 491 Senior Problems in Forestry. *Preq: Consent of department. Credits Arranged.* Faculty-approved problems in management or technology.

Selected 500-Level Courses Open To Advanced Undergraduates

FOR 511 Tree Improvement Research Techniques. *Preq: FOR 411 or GN 411. 3(1-4) Alt. S.*

FOR 512 Forest Economics. *Preq: Basic course in economics. 3(3-0) S.*

FOR (PP) 518 Advanced Forest Pathology. *Preq: PP 318 or equivalent. 3(3-0) Alt. F.*

FOR (PA) 522 Natural Resources Policy and Administration. *Preq: Advanced undergrad. standing including 12 hours of political science, grad. standing or PBS status. 3(3-0) S.*

FOR (ENT) 565 Advanced Forest Entomology. *Preq: ENT 301 or ENT 502 or CI. 3(2-2) S. Alt. yrs.*

- FOR 571 Advanced Topics in Growth and Yield.** *Preqs: FOR 272, ST 312. 3(3-0) S.*
- FOR 572 Public Forest and Renewable Resource Issues.** *3(3-0) Alt. S.*
- FOR (UNI) 584 The Practice of Environmental Impact Assessment.** *4(0-8) Alt. F.*
- FOR 591 Forestry Problems.** *Preq: Advanced undergrad. or grad. standing. Credits Arranged. F,S,Sum.*
- FOR 599 Methods of Research in Forestry.** *Preq: Advanced undergrad. or grad. standing. Credits Arranged. F,S,Sum.*

FOOD SCIENCE

FS 201 Food Science and the Consumer. *3(3-0) F,S.* An introduction to the science and practice of providing a wholesome, nutritious, economical and readily available supply of basic and processed foodstuffs. Chemical nature, microorganisms, safety, preservation and processing; organic and health foods; nutrition and the consumer; world food problem.

CARROLL

FS (ANS, NTR) 301 Modern Nutrition. *Preq: Sophomore standing. Food science majors may use as a free elective only. 3(3-0) F,S. (See Nutrition.)*

FS (ANS, PO) 322 Muscle Foods and Eggs. *Preq: BS 100. 3(2-3) F.* Processing and preserving fresh poultry, red meats, seafoods, and eggs. Ante and post-mortem events as they affect quality, yield and compositional characteristics of muscle tissues.

BALL, LARICK

FS (ANS) 324 Milk and Dairy Products. *Preq: BS 100. 2(2-0).* Composition of milk and dairy products, federal standards, raw milk procurement, cleaning and sanitizing and quality attributes.

HANSEN

FS 331 Food Engineering. *Preq: PY 211 or 221. 3(2-3) F.* Engineering concepts and their applications to the food industry. Mass and energy balances and principles related to fluid flow, heat transfer, steam generation and use, psychrometry, and refrigeration.

JONES

FS 400 Principles of Human Nutrition. *Preq: CH 220 or 221. 3(3-0) F.* Sources and properties of nutrients; function of nutrients in the human body; effect of food industry practices on nutrients.

FS 402 Food Chemistry. *Preq: CH 220 or 221. 3(2-3) F.* Introduction to the biochemistry of foods emphasizing basic composition, structure, properties and nutritive value. The chemistry of changes occurring during processing and utilization of foods.

A. FOEGEDING

FS 403 Food Analysis. *Preq: FS 402. 3(1-6) S.* Principles, methods and techniques for quantitative physical and chemical analyses of food and food products. Results of analyses evaluated in terms of quality standards and governing regulations.

SCHWARTZ

FS (MB) 405 Food Microbiology. *Preq: MB 401. 3(2-3) F.* The microorganisms of importance in foods, and their cultural and metabolic activities. The physical and chemical destruction of microorganisms in foods and kinetics involved. The conversion of raw foods by microorganisms into altered foods, and the nutrition, growth and preservation of the culture involved. Foods as vectors of human pathogens. The evolution of microbiological standards for foods.

P. FOEGEDING

FS 416 Quality Control of Food Products. *Preqs: FS 402, MB 401. 3(2-3) S.* Organization and principles of quality control for the food industry. Food laws and regulations, standards and specifications, sampling, statistical quality control, tests, cleaning and sanitation, and process control.

SHELDON

FS 421 Food Preservation. *Coreq: MB 401. 3(2-3) F.* An examination of and methods employed in the preservation of foods. Major emphasis on thermal, freezing, drying and fermentation processes and their relationship to physical, chemical and organoleptic changes in product. The relationship of these preservation techniques to the development of an overall processing operation. **CARROLL**

FS 423 Muscle Food Technology. *Preqs: FS 322, FS 421, FS 402. 3(2-3) S.* Chemistry, processing principles, quality, functional evaluation and storage stability of processed muscle food products. **BALL, LARICK**

FS 425 Processing Dairy Products. *Preqs: FS 324, FS 421. 3(2-3) S.* Unit operations in dairy processing. Formulation, processing, packaging and evaluation of fluid milk and manufactured products. **HANSEN**

FS 490 Food Science Seminar. *Preq: Sr. standing in Food Science or related field. 1(1-0) F,S.* Students research, prepare, and orally present selected or assigned current topics in Food Science. Emphasizes the importance of keeping abreast of developments in Food Science. Informal discussion relating to presentation by student and faculty. **JONES**

FS 491 Special Topics in Food Science. *Preq: Twelve hours of Food Science credit and Cl. 1-6 F,S,Sum.* Experimental investigation under supervision of a faculty member, directed reading or literature review, or new course offering on a trial basis. A written report is required, except for course with conventional lecture format.

Selected 500-Level Courses Open To Advanced Undergraduates

FS 504 Food Proteins and Enzymes. *Preq: FS 402 or BCH 451. 3(2-3) Alt. F.*

FS (MB) 506 Advanced Food Microbiology. *Preq: FS (MB) 405 or equivalent. 3(1-6) S.*

FS 511 Food Research and Development. *Preqs: FS 331, FS 402, FS (MB) 405. 3(2-3) S.*

FS (NTR) 530 Human Nutrition. *Preqs: FS 400 or NTR 415 or 419; BCH 451. 3(3-0) S.*

FS (HS) 562 Post-Harvest Physiology. *Preq: BO 421. 3(3-0) S.*

FS 580 Food Kinetics. *Preqs: MA 212, FS 331, FS 402, FS 405 or Cl. 3(3-0) Alt. S.*

FS (BAE) 585 Food Rheology. *Preqs: FS 331 or MAE 314. 3(2-3) Alt. F.*

FS 591 Special Problems in Food Science. *Preq: Grad. or sr. standing. Maximum 6. F,S,Sum.*

FISHERIES AND WILDLIFE SCIENCES

FW (ZO) 221 Conservation of Natural Resources. *3(3-0) F,S,Sum.* Importance of natural resources and their role in the human environment. The physical, biological and ecological principles underlying natural resource conservation with attention to the biological consequences of human impacts. **NOBLE, SAN JULIAN**

FW (FOR) 310 Fisheries and Wildlife Inventory and Management. *Preqs: FW (ZO) 353 or FW (ZO) 420; junior or senior standing. 6(0-18) Sum.* Exercises involving resource inventory, habitat analysis and evaluation, population estimation techniques, vegetation identification, forest mensuration and silviculture, and development of management plans are presented. Activities are predominately field oriented in an off-campus setting. Overnight field trips are also required. **LANCIA**

FW (ZO) 353 Wildlife Management. *Preqs: BS 100, ZO 201 or ZO 303. 3(3-0) F.* Describes historical development from empirical practices to the scientific American system. The principles of management, protection, and conservation of those warm-blooded vertebrates of aesthetic, sport or food values in urban, rural and wilderness areas. **POWELL**

FW (FOR) 404 Forest Wildlife Management. *Preqs: BS 100 or equiv. plus 8 hours of biological sciences; advanced undergraduate or graduate student. 3(3-0) S.* Relationships between forest management and wildlife populations and the effects of various silvicultural

techniques on wildlife are discussed. Habitat requirements of individual species, habitat evaluation procedures and habitat manipulation techniques are emphasized. LANCIA

FW (ZO) 420 Fishery Science. *Preqs: ZO 201 or 303, ZO 360. 3(2-2) F.* Fishery biology and ecology. Emphasis on the life history and biology of important sport and commercial fishes, the role of fishes in aquatic ecosystems, fisheries population biology, and theory and practice of fisheries management. Examples from freshwater, estuarine and marine systems. Laboratory covers methodology, sampling, age and growth analyses, and population estimation. CROWDER

FW (ZO) 430 Fisheries and Wildlife Administration. *Preqs: Political science course and either FW (ZO) 420 or FW (ZO) 353; advanced undergraduate or graduate standing. 3(3-0) S.* Describes and compares the administrative structures and programs of federal and state fish and wildlife agencies and develops an understanding of the basis on which these agencies function. Evaluate the interrelationships that fisheries-wildlife professionals, special interest groups, public agencies and legislative bodies play in resource management programs. DOERR

Selected 500-level courses open to Advanced Undergraduates

FW (ZO) 515 Growth and Reproduction of Fishes. *Preq. or coreqs: GN 411, ZO 420, 421, 441. 3(2-3) S. Alt. yrs.*

FW (ZO) 553 Principles of Wildlife Science. *Preq: ZO (BO) 360. 3(2-3) F.*

FW (ZO) 586 Aquaculture I. *Preqs: ZO (BO) 360, sr. or grad. standing. 3(3-0) F.*

FW (ZO) 587 Aquaculture I Lab. *Preqs: ZO (BO) 360, sr. or grad. standing; Coreq: FW 586. 1(0-3) F.*

GRAPHIC COMMUNICATIONS

GC 101 Engineering Graphics I. *2(0-3) F,S.* Graphical representation and solution of spatial problems. Emphasis is on development of logical and analytical approaches to problem solution. Conventional methods of graphically describing size and shape in the representation of basic mechanical elements. Practical engineering drawing applications are utilized.

GC 120 Foundation of Graphics. *3(2-2) F, S.* Introduction to technical orthographic, axonometric, oblique and perspective sketching and drawing for non-engineering students. Major emphasis is on describing shape and size of spatial problems by graphic methods. Application of graphical approaches to problem-solving. Opportunity to concentrate on problems relevant to each student's specific area of study.

GC 200 Applied Computer Aided Drawing. *Preqs: GC 101 or GC 120; and consent of the instructor. Restrictive enrollment. 3(2-2) F,S.* Uses and techniques of computer-aided drawing for industry, based on principles and standards of engineering graphics. Systematic methods of visualizing, constructing and graphically modeling two and three dimensional objects and materials for manufacturing and construction. Techniques for creating, storing, retrieving, scaling, editing, dimensioning and printing out drawing data base files.

GC 207 Engineering Graphics II. *Preq: GC 101 or GC 120. 3(2-2) F,S.* Advanced engineering graphics concepts and analytical skills relevant to the preparation of design, detail, and assembly production drawings for communicating technical data. General manufacturing materials and processes and the representation of common fasteners, basic machine elements, and structural components. Freehand sketching and instrument drawing emphasized.

GC 240 Furniture Graphics. *Preq: GC 101. 3(1-4) F, S.* Strengthen and adds knowledge of drawing concepts and skills with emphasis on sketching and special conventions that apply to furniture drawings; develops manufacturing and materials specification for furniture production.

GC 320 Introduction to Descriptive Geometry. *Preq: GC 101. 3(2-2) F,S,Sum.* Analysis and solution of three-dimensional space problems utilizing graphic principles of orthogonal projection techniques. Application of studies of lines, surfaces, solids, surface intersections, surface development, vectors, and civil, mechanical, and geographical structures.

GC 496 Special Topics in Graphic Communications. *Preq: Consent of instructor.* Topical study in areas of current interest and need to students and/or needs of curricula served by Graphic Communications.

GENETICS

GN 301 Genetics in Human Affairs. *3(3-0) F,S,Sum.* Appreciation and understanding of genetics in everyday life. Genetic perspective on normal human development, birth defects, birth control, cancer, organ transplants, intelligence, mental illness, and radiation and chemical exposure and issues raised by applications of recently developed genetic techniques such as *in vitro* fertilization, genetic engineering and prenatal monitoring.

McKENZIE

GN 411 Principles of Genetics. *Preqs: BS 100, Jr. standing. 3(3-0) F,S,Sum.* Basic concepts and principles of prokaryotic and eukaryotic genetics. Mendelian inheritance, polygenic inheritance, linkage and mapping, chromosome aberrations, population genetics, evolution, DNA structure and replication, gene expression, mutation, gene regulation, extranuclear inheritance, bacterial and viral genetics, and recombinant DNA technology.

BEWLEY, EMIGH,

GN 412 Elementary Genetics Laboratory. *Coreq: GN 411. 1(0-3) F,S.* Genetic experiments and demonstrations using a variety of bacterial, plant and animal organisms. Mendelian inheritance, linkage analysis, population genetics, cytogenetics, mutation, molecular genetics and biochemical genetics.

McKENZIE

Selected 500-Level Courses Open To Advanced Undergraduates

GN 504 Human Genetics. *Preq: GN 301 or 411 or equivalent. 3(3-0) F.*

GN 505A,B,C,D Genetics I. *Preq: GN 411. 1-4 F.*

GN 506A,B,C Genetics II. *Preq: GN 411; Coreq: ST 511. 1-3 S.*

GN (PO) 520 Poultry Breeding. *Preq: GN 411. 3(2-2) S.*

GN (ZO) 532 Biological Effects of Radiations. *Preq: BS 100 or GN 301 or CI. 3(3-0) S.*

GN (ZO) 540 Evolution. *Preq: Nine credits in biological sciences. 3(3-0) S.*

GN 560 Molecular Genetics. *Preqs: GN 411; BCH 451. 3(3-0) F.*

GN (BCH) 561 Biochemical and Microbial Genetics. *Preqs: BCH 451 or 551, GN 411 or 505, MB 401 or equivalent. 3(3-0) F.*

GREEK LANGUAGE AND LITERATURE

GRK 101 Elementary Greek I. *3(3-0) F.* Introduction to Classical Greek. Greek alphabet, basic grammar and syntax. Readings include Plato, Lysias and the New Testament.

GRK 102 Elementary Greek II. *Preq: GRK 101. 3(3-0) S.* A second course in Classical Greek, continuing and expanding the work of GRK 101. Completes study of grammar. Readings from major authors including Herodotus, Thucydides, and Xenophon.

GRK 201 Intermediate Greek I. *Preq: GRK 102. 3(3-0) F.* Introduction to Greek prose. Emphasis upon improvement of reading skill through vocabulary acquisition and study of complex grammar. Introduction to Attic dialect through reading Plato, and Koine Greek through reading the New Testament. Examination of the importance of these works to Western literature and culture.

GRK 202 Intermediate Greek II. *Preq: GRK 201. 3(3-0) S.* Reading in Homer's *Iliad* and the New Testament. Techniques of oral poetry, the use of myth, and the literary and historical significance of the *Iliad* are studied. In the New Testament the analysis of differences between classical and Koine Greek is emphasized.

GRK (LAT) 310 Classical Mythology. *3(3-0) F.* An introduction to Greek and Roman mythology through the writings and art of the Classical period. Discussion of creation stories, the major gods and heroes, the underworld and afterlife. Examination of the intellectual, religious and educational role of myth and of the most important theories of interpretation and classification. All readings and discussion in English.

GRK 320 Greek Tragedy in Translation. *3(3-0) F.* Tragedies of Aeschylus, Sophocles and Euripides in translation. Literary and social aspects of individual plays and tragic genre in fifth century. Selections from Aristophanes, Plato, Aristotle and Seneca on Greek tragedy.

GRK 333 Medical Terminology. *2(2-0) S.* Study of the formation of medical terms from their Greek and Latin roots designed both to build vocabulary and to teach the uses of a medical dictionary.

GRK 371 The Origins of American Mythology. *3(3-0) S.* Studies oral-traditional literature, formulaic myth composition and the Indo-European origins of the American folk hero. Readings include *Iliad*, *Gilgamesh*, Sanskrit *Puranas* and *Beowulf*; films such as *Stagecoach* and *Superman* are included.

HISTORY OF ART

HA 201 History of Art From Ancient Greece Through the Renaissance. *3(3-0) F, S. A* survey of art from Ancient Greece and Rome through the Italian Renaissance covering the major art forms of painting, sculpture, and architecture. Includes the early medieval period as well as the later developments of the Romanesque and Gothic eras.

HA 202 History of Art From the Renaissance Through the 20th Century. *3(3-0) F, S. A* survey of art from the Northern Renaissance in Europe through the 20th century in Europe and America. Painting, sculpture and architecture are examined as well as the more recent techniques of collage, trottage and other mixed media approaches.

HA 203 History of American Art. *3(3-0) S. Alt. yrs.* A history of American Art (painting, sculpture and architecture) from the Colonial Period through the 20th century.

HA 298 Special Topics in Art History. *3(3-0).* Introductory survey of particular areas of art history. Specific topics will vary semester to semester, but emphasis will be on chronological periods such as 20th century art, the Italian Renaissance, etc.

HA 401 19th Century European and American Art. *3(3-0) F. Alt. yrs.* The major movements of 19th century European and American art including Neo-Classicism, Romanticism, Realism and Impressionism through Cezanne. Lectures emphasize the theoretical basis for the development of these stylistic movements. SPENCER

HA 402 20th Century European and American Art. *3(3-0) S. Alt. yrs.* 20th century European and American art, focusing on the theoretical background contributing to the development of the major art movements of this century. SPENCER

HA 404 Italian Renaissance Masters. *3(3-0). Alt. yrs.* Development of Italian Renaissance art 1300-1550, including the pioneers of Giotto and Duccio; founders of the early Renaissance: Masaccio, Donatello, and Brunelleschi; great masters of the High Renaissance: Michelangelo, Raphael and Leonardo da Vinci. Works of art analyzed in terms of style, subject matter and historical context.

HA 498 Independent Study in History of Art. *Preq: 3 hrs. of HA and permission of instructor. 1-6.* Directed independent study of topics in the History of Art.

HISTORY

NOTE: 200-300 level courses open to all students without prerequisite. Previous course work in any particular field of history is not necessary in order to take any 200-300 level course.

HI 205 Western Civilization Since 1400. *3(3-0) F,S.* A survey of Western Civilization from the Renaissance to the present.

HI 207 Ancient World to 180 A.D. *3(3-0) F,S.* The ancient cultures of the Middle East, Greece and Rome, including Mesopotamian, Egyptian, Hebrew, Phoenician, Greek and Roman societies and cultures.

HI 208 The Middle Ages. *3(3-0) F,S.* Medieval civilization as it emerged from the declining Roman Empire through its apogee in the 13th century. The transition from the classical to the medieval world, the impact of the Germanic influx, the Islamic influence, the Crusades, and the political, economic, and social institutions of the High Middle Ages.

HI 209 Europe, Renaissance to Waterloo, 1300-1815. *3(3-0) F,S.* A survey of the period of transition from medieval to modern Europe. Includes the decline of medieval institutions, the Renaissance, the Reformation and Counter-Reformation, rise of Absolutism, the English 17th-century revolution, the French Revolution and Napoleonic era.

HI 210 Modern Europe 1815-Present. *3(3-0) F,S.* An introductory survey of the history of European societies and political systems from 1815 to the present.

HI 215 Latin America to 1826. *3(3-0) F,S.* The origins and development of social, political, economic and religious institutions from pre-conquest times to the achievement of independence. The ancient American cultures; Spain and Portugal before 1492; the conquest and settlement; Spanish rule in theory and practice; economic life; the Church; land and labor; the African contribution; the Portuguese in Brazil; the independence movements.

HI 216 Latin America Since 1826. *3(3-0) F,S.* Social, political, economic, and intellectual life in the 19th and 20th centuries. Mexico, Argentina, Brazil, Peru, and Cuba, including the social structure of the new nations; 19th century liberalism; the force of tradition; relations with Europe and the United States; the Monroe Doctrine and U.S. intervention; economic change; caudillo rule; 20th century upheavals; the Mexican Revolution; Peron's Argentina; and Castro.

HI 221 An Introduction to British History to 1688. *3(3-0) F,S.* A general survey of the history of British society, culture, and politics to 1688.

HI 222 An Introduction to British History Since 1688. *3(3-0) F,S.* A general survey of the history of British society, culture, and politics since 1688.

HI 233 The World in the 20th Century. *3(3-0) F,S.* National and international problems in the Western and non-Western world, including institutions and ideas at the turn of the century, origins and effects of the First World War, the post-war challenge to Western democratic supremacy from within and without, the Second World War, and problems of the post-war period.

HI 241 United States to 1783. *3(3-0) F,S.* The European background of American history; establishment of English colonies in America; colonial historical development; the conflict with England, the securing of independence, and the establishment of independent government.

HI 242 United States, 1783-1845. *3(3-0) F,S.* Inauguration of the new nation; territorial expansion and the westward movement; growth of democracy and social reform; the institution of slavery; development of national feeling and sectional tensions.

HI 243 United States, 1845-1914. *3(3-0) F,S.* Slavery, anti-slavery and the coming of the Civil War; the war and the reconstruction of the nation; European immigration, the rise of industrialism and the Populist and Progressive response; the emergence of the United States as a world power.

HI 244 United States Since 1914. *3(3-0) F,S.* The United States and the First World War; the Society of the 1920's; the Great Depression and the New Deal; the Second World War and post-war international problems; the Truman and Eisenhower years; America in the 1960's and 1970's.

HI 263 Asian Civilization to 1800. *3(3-0) F,S.* Introductory survey of the great civilizations of Asia; particular attention to India, China and Japan. Emphasis on comparative study of Asian religions, political systems, art, and literature.

HI 264 Modern Asia: 1800 to Present. *3(3-0) F,S.* Introductory survey of 19th and 20th century Asia, with attention to Japan, Southeast Asia, India and China. Emphasis on cultural and political crises of the 19th century and revolutionary transformations of the 20th century.

HI 275 Introduction to History of South and East Africa. *3(3-0) F,S.* The history of Southern and Eastern Africa, focusing on such topics as the African kingdoms (the Lunda, Buganda and Zulu kingdoms); the European encroachment, the origins of Colonialism and the character of colonial societies and economies, South African apartheid, African Protest, nationalism and independence.

HI 276 Introduction to History of West Africa. *3(3-0) F,S.* The history of Western Africa, focusing on such topics as the forest civilizations and the slave trade, the trade and the expansion of Islam, the colonialism in West Africa, the emergence of African nationalism and the achievement of independence, and post colonial West Africa.

HI 298 Special Topics in History. *3(3-0) F,S.* Used for new course development and for presentation of material or techniques not normally available in regular course offerings.

HI 315 History of the Crusades: Conflict and Culture in the Mediterranean. *3(3-0) Alt. yrs.* The causes and deeds of the long conflict over the Holy Land during the Middle Ages, known as the Crusades, and the concurrent cultural interchanges and economic, social, political and legal relations between Classical Islamic and Western Medieval European civilizations. Readings are given in translated Arabic, Latin, Hebrew and Greek sources as well as secondary authors. Lectures are given from both the Western and Eastern perspectives.
NEWBY, RIDDLE

HI 321 Ancient and Medieval Science. *3(3-0) F.* Selected topics in the history of pre-modern science are studied for both their intrinsic interest and to gain perspective on the nature of modern science. Examples are taken from pre-history, Mesopotamia, Egypt, Greece, Rome, Islam, and the medieval Christian West, with the possibility of comparisons to other cultures.
SYLLA

HI 322 Rise of Modern Science. *3(3-0) F,S.* Science in the Renaissance and Scientific Revolution of the 16th and 17th centuries. Newtonian science. Mechanics and the chemical revolution in the 18th century. Scientific synthesis in the 19th century: physics, chemistry, geology, and biology. 20th century revolutions in physics. Attention is paid both to scientific ideas and to the cultural and institutional contexts of science.
MULHOLLAND, KIMLER, SYLLA

HI (REL) 324 American Religion After Darwin. *3(3-0).* (See Religion.)

HI 333 History of American Sport. *3(3-0).* An examination of sports as a reflection of and a factor within the general development of American history.
BEEZLEY

HI 336 America in Movies. *3(2-3) S.* An introductory study of American popular culture through important motion pictures portraying major themes, events and lives in American history. The "film image" is compared with leading historians' accounts of the same episodes in order to introduce some problems of what is "true history."
WISHY

HI 341 Technology in History. *3(3-0) S.* The role of technology in society from earliest times to the present. Major achievements in technology and an examination of the nature of invention, innovation and adaptation of technologies and their impact on Western Civilization.
MULHOLLAND

HI 346 The Vietnam War. 3(3-0) S. The Vietnam War in historical context. Relations of Vietnam with neighbors, north-south division, colonial influences; the origins and progression of American involvement; the course of the war; the impact of the war in Asia and America. HOBBS, OCKO

HI 348 History of Women in the United States. 3(3-0). The history of women's roles as they relate to economic and social change in the United States. The lives of women in pre-industrial and industrial America with focus on women's experiences in both the public sphere (politics and reform for example) and the private sphere (domestic, reproductive, and family patterns). GLENN

HI 350 American Military History. 3(3-0) F. This course examines the American military experience and its relationship to other historical developments. The use of military force is considered in terms of strategy and tactics and as an element in the nation's diplomatic political, social, economic and intellectual life. HOBBS, R. McMURRAY

HI 351 U.S. Naval History. 3(3-0) S. The role of the U.S. Navy in American history. Sea power, national defense and foreign policy. The impact of technology on naval warfare and the historical evolution of missions of the U.S. Navy. HOBBS

HI 364 History of North Carolina. 3(3-0) F. Surveys the history of North Carolina from early European exploration to the present. This course focuses on the features of North Carolina society which made this state similar to and different from other southern states and the nation as a whole. Field trips are included as feasible. HARRIS, O'BRIEN

HI 365 The American West. 3(3-0). A history of the American Frontier with emphasis on the trans-Mississippi West. Cycles of exploration, conquest, and exploitation of this region. Influence of the frontier in the development of the United States. CRISP

HI (EB) 370 The Rise of Industrialism. *Preq: EB 201 or 212.* 3(3-0) F. (See Economics and Business.)

HI (EB) 371 Evolution of the American Economy. *Preq: EB 201 or 212.* 3(3-0) F. (See Economics and Business.)

HI 372 Afro-American History Through the Civil War, 1619-1865. 3(3-0) F. After a brief consideration of their African background, the course considers the particular role, experience and influence of Afro-Americans in the United States through the Civil War. BUTLER, L. McMURRY

HI 373 Afro-American History Since 1865. 3(3-0). The history of Afro-Americans in the United States from the Reconstruction era through the Civil Rights Movement or Black Revolution of the 1950s and 1960s. L. McMURRY

NOTE: Prerequisite for 400 level courses: Three hours of history.

HI 400 Civilization of the Ancient Near East. 3(3-0). The civilization of Mesopotamia and Egypt from earliest times to the fall of Babylon in 539 B.C. SACK

HI 403 Ancient Greek Civilization. 3(3-0). The history of the Hellenes from the Minoan civilization through Alexander's legacy, with readings in Herodotus and Thucydides. SACK

HI 404 Rome to 337 A.D. 3(3-0). Traces the development of ancient Rome from its origins in Italy, through the rise as an Empire embracing the entire Mediterranean World and Western Europe, to Constantine, Christianity and the foundation of Constantinople. Examines critically the political achievement of a people who rose from an obscure Italian city to a world empire, with emphasis on the analysis of primary sources. PARKER

HI 405 History and Archaeology of the Roman Empire. *Preq: Three hours HI.* 3(3-0). *Alt. yrs.* Analysis of Rome's unparalleled rule over the entire Mediterranean World in the first four centuries A.D. through use of literary and archaeologic sources. Special emphasis on imperial army and frontier security. PARKER

HI 406 From Roman Empire to Middle Ages. 3(3-0). Late Antiquity and the early Middle Ages. The transition from classical civilization to the basis of modern civilizations: the Fall of Rome, the Germanic kingdoms, Byzantium, the establishment of Christianity, the birth and growth of Islam. PARKER, RIDDLE

HI 407 Islamic History to 1798. 3(3-0). The history of the Islamic Near East to 1798. Topics include the East Mediterranean before Islam, Muhammad and the development of Islam, sources of Muslim civilization, Islamic law, science, philosophy, and architecture, Islam in Spain, India, Asia, and Africa, the Crusades, the Ottomans, Islam and Europe. NEWBY

HI 408 Islam in the Modern World. 3(3-0). Evolution of modern Islam from 17th century to the present, North Africa, Middle East and India. Pre-modern Islamicate empires, European intervention, Islamic reaction and response. Historical origins of current issues in the Islamic world. NEWBY, GILMARTIN

HI 409 The High Middle Ages. Credit will not be given for both HI 409 and HI 509. 3(3-0). An analysis of various aspects of medieval culture for the period 936-1250. Selected topics are examined using source readings in such subjects as the revival of the Roman Empire, monastic and papal reform, the rise of universities, the evolution of representative bodies, the Gothic style, troubadour and goliardic poetry, scholasticism, and the revival of Roman law. RIDDLE

HI 410 Italian Renaissance. 3(3-0). Renaissance humanism, an educational ideal and an awareness of man as the sole creator in the historical world, is examined in its relationship to the Italian republics and princedoms of the 14th through the 16th century. BANKER

HI 411 The Protestant and Catholic Reformation of the 16th Century. 3(3-0). The conditions and criticisms which led to reform and the nature of the institutional and theological changes affected by the various churches and sects. Special attention to Luther and Calvin. BANKER

HI 415 Revolutionary Europe. Credit will not be given for both HI 415 and HI 515. 3(3-0). A broadly based analysis of Europe's first revolutionary era. Topics covered are the Enlightenment and its impact, the causes and character of the Revolution in France, and the impact of these events in France and Europe.

HI 416 European Society and Culture in the 18th Century. Preq: Three hours HI. Credits will not be given for both HI 416 and HI 516. When piggy-backed as HI 416/516 junior standing required. 3(3-0). Alt. yrs. Study of social traditions and change in Western Europe in the 18th century. Population growth and its effects, changes in lower and middle class family, evolution of labor, experience and perception of poverty, types of popular protest. LaVOPA

HI 417 European Thought—Locke to Marx. 3(3-0). An historical examination of some of the major figures in European thought, beginning with the English Enlightenment and ending with Marxian socialism. Includes such writers as Voltaire, Hume, Rousseau, Kant, Mill, and Baudelaire. VINCENT

HI 418 Fascism in Germany and Italy, 1919-1945. Credit for both HI 418 and 518 will not be allowed. 3(3-0). Hitler and Mussolini: two aspects of European Fascism in the interwar period. DE GRAND

HI 419 Modern European Imperialism. 3(3-0). Historical background of European Colonialism; its impact on shaping the modern world; influence on modern independence movements, major power foreign policy, Third World concepts in international relations. GILMARTIN

HI 421 European Intellectual History: The Eighteenth Century. Preq: 3 hours HI. 3(3-0). Alt. yrs. Historical examination of some of the major figures of the European Enlightenment, beginning with Locke and ending with Kant. LaVOPA, VINCENT

HI 422 European Intellectual History: The 19th Century. *Preq: 3 hours HI. 3(3-0).* *Alt. yrs.* Historical examination of some of the major figures of European thought during the 19th century, beginning with the enthusiasm of the period of the French Revolution and ending with the disillusionment of the fin de siècle. VINCENT

HI 425 Tudor and Stuart England. *3(3-0).* British History from the Reformation to the Civil War. Primary emphasis is given to certain key developments in social, political and economic life such as the development of a new concept of kingship, the growing independence of Parliament, the search for religious uniformity and the changing status of the aristocracy and gentry. CARLTON

HI 429 20th Century Britain. *3(3-0).* British political, social and economic history since 1914, with reference to the effects of two world wars, the growth of the Welfare State, Britain's decline as a power, and its search for a new role in the world. CARLTON

HI 430 Modern France. *3(3-0).* French history from the downfall of Napoleon I to the present, with a short introductory survey of the Old Regime and the French Revolution. Cultural, social, and economic developments and political trends. VINCENT

HI 431 Germany: Luther to Bismarck 1500-1871. *3(3-0).* A history of Germany from the Reformation to the completion of national unification in 1871, including the major historical events and personalities and emphasizing the impact of socio-economic changes on politics and culture. LaVOPA

HI 432 History of Germany Since 1871. *3(3-0).* German history from the unification of 1871 to the present, concentrating on problems of nationalism and political and social reform. LaVOPA

HI 438 History of Russia to 1881. *3(3-0).* The social, political, economic and cultural history of Kievan Russia, Muscovy and Imperial Russia through the emancipation of the serfs and the fundamental reforms that followed. Emphasis on internal developments; some attention to foreign policy. SURH

HI 439 History of the Soviet Union. *Preq: Credit may not be given for both HI 439 and HI 539. 3(3-0).* History of the Soviet Union from the revolutions of 1917 to the present, emphasizing political, economic and cultural developments that have molded the Soviet state and society. Attention is also given to foreign policy with emphasis on the position of the Soviet Union in the world since 1945. SURH

HI 442 The United States: Revolution to Constitution. *Credit will not be given for both HI 442 and HI 542. 3(3-0).* The conflict with Great Britain after 1763 leading to the declaring of independence; the war for American independence; the political, social, and ideological problems in establishing the government of the new nation. BUTLER

HI 446 Civil War and Reconstruction. *Credit will not be given for both HI 446 and HI 546. 3(3-0).* A study of the period of sectional strife, war, and reconstruction, including a close examination of the sectional polarization of the 1850s, the impact of the war on both northern and southern societies, and the trauma of reconstructing the Union. HARRIS

HI 452 Recent America. *3(3-0).* Examination of contemporary opinions and "historical" interpretations of major problems in American life since 1939 including World War II, its social and economic consequences; Korea and the Cold War; big business and labor; civil rights and feminist movements; countercultures, Vietnam and Watergate. HOBBS

HI 454 History of U.S. Foreign Relations, 1900-Present. *Credit for both HI 454 and HI 554 will not be allowed. 3(3-0).* America's emergence as a world power; American diplomatic history since 1900; the expansion of American economic and cultural relations; the evolution of the American foreign policy bureaucracy; and the historical forces and personalities that have shaped American relations with other nations. BEERS

HI 456 American Heritage. *3(3-0).* Development of American ideals since colonial times studied through the words of famous Americans and in the context of events like the American Revolution and the Great Depression. Stress on the conflicts, during important crises, between freedom and order, liberty and equality, free enterprise and social justice, religious truth and workaday morality, the nation and the world. WISHY

HI 457 U.S. Social History Methods. *Credit will not be given for both HI 457 and HI 557. 3(3-0).* Introduction to U. S. social history. Survey of methodologies, quantification, social science theory, comparative analysis, with application to in-depth investigation of selected themes, including demography, class, ethnicity, labor, race and sex. O'BRIEN

HI 458 Modern American Historical Biography. *3(3-0).* The impact on American life in the 20th century of some important people in fields such as politics, war and peace, sports and various forms of communication is explored through the medium of historical biography. JACKSON

HI 461 Civilization of the Old South. *3(3-0).* The distinctive features of the Old South as part of the regional development of United States history. Consideration of colonial factors in the making of the South, development of the plantation system and slavery, Southern social order, intellectual and cultural life, economic development, and rise of Southern nationalism. CRISP

HI 462 The New South in America. *3(3-0).* A brief investigation of distinguishing features of Southern society on the eve of the Civil War and extended analysis of the subsequent development of this society in a modernizing nation. O'BRIEN

HI 465 History of Urban Life in the U.S. *Credit for both HI 465 and HI 565 will not be allowed. 3(3-0).* The historical background of today's urban problems. KING

HI 466 The History of Urban Life in the United States, 1865-Present. *Credit for both HI 466 and HI 566 will not be allowed. 3(3-0).* Designed to give the student an understanding of the historical background of today's urban problems. KING

HI 467 Modern Mexico. *3(3-0).* Major developments in Mexican national life since 1821. The 19th century: the era of Santa Anna, the war with the United States, the Reform, the French intervention, and the dictatorship of Porfirio Diaz. The 1910 Revolution and the resulting transformation of Mexico's political, social and economic institutions. Reading knowledge of Spanish helpful but not required. BEEZLEY

HI 468 Guerrillas and Soldiers in Latin America. *3(3-0).* Analyzes two major political phenomena in recent Latin American history—military governments and guerrilla movements. Examines the rise of militarism, the philosophies and tactics of rural and urban guerrilla movements, and resulting conflict between soldiers and guerrillas in Bolivia, Peru, Argentina, Brazil, Uruguay, and Nicaragua. SLATTA

HI 469 Latin American Revolutions in the Twentieth Century. *Credit for HI 469 and HI 569 will not be given. 3(3-0).* The varieties of revolutionary change in twentieth-century American revolutions: Argentina, Bolivia, Peru, Cuba, and Chile. BEEZLEY, SLATTA

HI 470 The Japanese Economy. *Preqs: EB 301; 3 hours HI. 3(3-0) S.* (See Economics and Business). FLATH, R. SYLLA

HI 471 Revolutionary China. *3(3-0).* China 1900 to present. Examination of political, cultural, and socio-economic revolutionary phases of China's 20th Century transformation from traditional empire to communism. Particular attention to post-1949 problems of nation-building. OCKO

HI 472 Modern Japan, 1850 to Present. *3(3-0).* Japan's emergence as a nation and world power. BEERS

HI 473 20th Century Asian Revolutionaries. *3(3-0).* Use of psycho-historical techniques for comparative study of the lives and works of great figures in 20th century Asia: Sukarno, Mao Tse-tung, Mohandas Gandhi and Ho Chi-Minh. OCKO

HI 474 Modern India. *Preq: Three hrs. of HI. 3(3-0) F.* The history of the Indian sub-continent, from the 16th century to the present. Focus on political, economic and cultural change under the Mughal Empire and the British Raj; the problems of independent India, Pakistan and Bangladesh. GILMARTIN

HI 475 History of the Republic of South Africa: Race, Class, and Politics in Historical Perspective. 3(3-0). The evolution of South Africa's plural society, with emphasis on the interaction of diverse peoples and cultures. Particular attention is given to the period marked by rapid economic growth since 1870. VICKERY

HI 476 Leadership in Modern Africa. 3(3-0). An investigation of the conditions under which 20th century African leaders have obtained and exercised power, together with detailed looks at the careers of several prominent African leaders. The case studies range from radicals to reactionaries, democrats to tyrants, and include such figures as Nkrumah, Kenyatta, Nyerere, Amin, Cabral, Vorster, and Senghor. VICKERY

HI 480 Scientific Revolution: 1300-1700. *Preq: Three hrs. of HI.* 3(3-0) *Alt. yrs.* Factors behind dramatic scientific changes of the seventeenth century. Role of mathematics and experiment. Interaction of the new science with trends in philosophy, religion, alchemy, magic, medicine, and with institutional, educational, political, economic and technological factors. SYLLA

HI 481 History of the Life Sciences. *Credit will not be given for both HI 481 and HI 581.* 3(3-0). Surveys the major ideas, methods, institutions, and individuals that have contributed to the biological sciences from antiquity to modern times and examines the connections between the life sciences and other aspects of culture, including the physical sciences, religious belief, medical practice, and agriculture. KIMLER

HI 486 History and Principles of Administration of Archives and Manuscripts. *Credit will not be given for both HI 486 and HI 586.* 3(3-0) *F.* Nature, importance and use of original manuscripts; the history and evolution of written records and institutions administering them; the principles and practices of archives administration. OLSON

HI 487 Application of Principles of Administration of Archives and Manuscripts. *Preqs: 3 hours of history plus HI 486. Credit in both HI 487 and 587 is not allowed.* 3(0-9) *S.* Internship training in the application of the principles and practices of archival management as developed in History 486. OLSON

HI 491 Seminar in History. *Open to juniors and seniors in history and to other juniors, seniors and graduate students with departmental permission.* 3(3-0) *F,S.* Topics vary each semester. Consult history department for specific topics.

HI 495 Honors Research in History I. *Open only to seniors in history honors program.* 2(0-2) *F.* Preparation of the honors thesis. Topics and procedures to be determined by the student and the supervising faculty member.

HI 496 Honors Research in History II. *Open only to seniors in history honors program.* 4(0-4) *S.* Preparation of the honors thesis. Topics and procedures to be determined by the student and the supervising faculty member.

HI 498 Independent Study in History. *Permission of Department required.* 1-6. *F,S.* Extensive readings on predetermined topics focused around a central theme.

Selected 500-Level Courses Open To Advanced Undergraduates

NOTE: Prerequisite: (500 level) Six hours of advanced history or equivalent.

HI 509 The High Middle Ages. *Credit in both HI 409 and HI 509 is not allowed.* 3(3-0).

HI 515 Revolutionary Europe. *Credit in both HI 415 and HI 515 is not allowed.* 3(3-0).

HI 516 European Society and Culture in the Eighteenth Century. *Credit in both HI 516 and 416 is not allowed.* 3(3-0).

HI 518 Fascism in German and Italy, 1919-45. *Credit in both HI 418 and HI 518 is not allowed.* 3(3-0).

HI 519 Modern European Imperialism. *Credit both HI 419 and 519 is not allowed.* 3(3-0).

HI 528 England in the Age of the American Revolution. 3(3-0).

- HI 539 History of the Soviet Union.** *Credit in both HI 439 and HI 539 is not allowed. 3(3-0).*
- HI 542 The United States: Revolution to Constitution.** *Credit in both HI 442 and 542 is not allowed. 3(3-0).*
- HI 546 Civil War and Reconstruction.** *Credit in both HI 446 and HI 546 is not allowed. 3(3-0).*
- HI 554 History of U.S. Foreign Relations, 1900-Present.** *Credit for both HI 454 and HI 554 is not allowed. 3(3-0).*
- HI 557 U. S. Social History Method.** *Credit in both HI 457 and HI 557 is not allowed. 3(3-0).*
- HI 561 Civilization of the Old South.** *Credit in both HI 461 and 561 is not allowed. 3(3-0).*
- HI 565 The History of Urban Life in the U.S., 1607-1865.** *Credit in both HI 465 and HI 565 is not allowed. 3(3-0).*
- HI 566 The History of Urban Life in the U.S., 1865-Present.** *Credit in both HI 466 and HI 566 is not allowed. 3(3-0).*
- HI 569 Latin American Revolutions in the Twentieth Century.** *Credit in both HI 469 and HI 569 is not allowed. 3(3-0).*
- HI 576 Leadership in Modern Africa.** *Credit in both HI 476 and 576 is not allowed. 3(3-0).*
- HI 580 Scientific Revolution: 1300-1700.** *Credit in both HI 480 and 580 is not allowed. 3(3-0).*
- HI 581 History of Life Sciences.** *Credit in both HI 481 and HI 581 is not allowed. 3(3-0).*
- HI 586 History and Principles of the Administration of Archives and Manuscripts.** *Credit in both HI 486 and HI 586 is not allowed. 3(3-0).*
- HI 598 Special Topics in History. 1-6.**

HORTICULTURAL SCIENCE

HS 100 Home Horticulture. *Credit is not allowed for both HS 101 and HS 100. For non-majors only. 3(3-0) F,Sum.* Introduction and review of home horticulture as it relates to the horticultural enthusiast. A general understanding of plant structure and development; house plants, flower arranging, home greenhouses, growing trees, shrubs, and flowers in the home landscape; vegetable and fruit gardening; pesticides for the home gardener, and other related topics.

HS 101 Plants for Home and Pleasure. *3(2-3) F,S.* Basic uses of plants and flowers in and around the home. Indoor plants, flower arranging, home landscaping, and flower, vegetable and fruit gardening. LANE

HS 201 Principles of Horticulture. *3(3-0) S.* Basic principles of production, processing and utilization of fruit, vegetable, flower, and ornamental crops. The economic importance and distribution of horticultural enterprises. The roles of horticulture in world nutrition and food supply, improvement of environmental quality in the landscape, aesthetic values, and medicinal uses. LARSON

HS 211 Ornamental Plants I. *Preq: BS 100. 3(1-5) F.* Identification, distribution, growth, characteristics, adaptation, and usage of ornamental plants. Emphasizes bedding plants, trees, and gymnosperms. FANTZ

HS 212 Ornamental Plants II. *Preq: BS 100. 3(1-5) S.* Identification, distribution, growth, characteristics, adaptation, and usage of ornamental plants. Emphasizes shrubs, ground covers, vines, bulbs, and interior landscape plants. FANTZ

HS 301 Plant Propagation. *Preq: BS 100, or BO 200. 4(3-3) F.* Theories and techniques necessary to the successful clonal and seed reproduction of higher plants. The influence of hereditary, environmental and pathological variation on the plant products. Recent developments in propagation techniques. BALLINGTON

HS 342 Landscape Horticulture. *3(2-3) F, S.* Introduction to design principles for landscaping small properties. Includes history, design process, site planning and user considerations, and choosing appropriate plant materials. Students will complete a series of landscape plans. Field trips to homes and gardens. HOOKER, TRAER

HS 371 Interior Plantscapes. *Preqs: BS 100 or BO 200; second semester sophomore standing. 3(2-3) S.* Identification, selection, installation, utilization, and maintenance of plants commonly used in commercial interior settings. LANE

HS 400 Residential Landscaping. *Preqs: DF 234; HS 211, 212, 342; HS 416 or DN 433; SSC 200, DN 257, 430. Seniors in the Landscape Horticulture area of concentration given priority. 6(0-9) F, S.* Equips students with the necessary skills to create functional, aesthetic, and humanistic designs for residential and other small scale projects. Aspects of problem identification, project organization, design, execution, and evaluation will be studied to this end. HOOKER

HS 411 Nursery Management. *Preqs: BS 100, SSC 200. 3(2-3) F.* Principles and practices of production, management, and marketing of field-grown and container-grown nursery plants. One of three scheduled weekend field trips required. RAULSTON

HS 416 Principles of Ornamental Planting Design. *Preqs: HS 211, HS 212, HS 342, SSC 200, DN 234. 3(2-4) S.* Design principles for arrangement of plant masses in the landscape to correctly relate plant shapes, volumes, ornamental characteristics, scale changes with time, and adaptation to site conditions in order to create a successfully planted landscape. A weekend field trip will be required. TRAER

HS 421 Tree Fruit Production. *Preqs: BS 100 or BO 200, SSC 200, HS 201. 3(2-3) F.* Identification, adaptation, production and marketing methods of the principal tree fruit and nut crops of the United States. Fundamental principles underlying perennial plant culture applied to the production of specific fruit crops with emphasis on the crops of commercial importance in North Carolina. A weekend field trip is required. WERNER

HS 422 Small Fruit Production. *Preqs: BS 100 or BO 200, SSC 200, HS 201. 3(2-3) S. Alt. years.* An introduction to the principal small fruit crops grown in the United States—their place and value in the agricultural economy and in market and home gardens. Emphasis will be placed on developing an understanding of the basic morphology and physiology of these plants and relating their structural and functional features to intensive and varied cultural practices. GOLDY

HS 431 Vegetable Production. *Preq: BS 100, SSC 200. 4(3-3) F.* The most important commercially grown vegetable crops in the U.S. are treated individually, considering origin, botany, importance, genetics, physiology, storage, and marketing of each, but emphasizing production practices. Applied aspects of commercial field production in North Carolina are treated as a separate unit at the end of the semester. PEET

HS 440 Greenhouse Management. *Preqs: BS 100, SSC 200. 3(2-3) F.* Greenhouse site selection, construction, heating, cooling, and maintenance. The influence of environmental factors affecting growth and flowering of floricultural and greenhouse crops. Greenhouse media, fertilization, water sanitation. Field trips to commercial greenhouses. NELSON

HS 441 Floriculture I. *Preqs: BS 100, SSC 200. 3(2-3) F.* Production and marketing procedures for fall-flowering floricultural crops. LARSON

HS 442 Floriculture II. *Preqs: BS 100, SSC 200. 3(2-3) S.* Production and marketing procedures for spring-flowering floricultural crops. LARSON

HS 471 Tree and Grounds Maintenance. *Preqs: BS 100 or BO 200; PP 315; SSC 200. 4(3-3) S.* Principles and practices of shade tree and grounds maintenance. Shade trees, small flowering trees, and shrubbery; installation, pruning, transplanting, fertilization, structural support, and diagnosis and management of parasitic and non-parasitic disorders. BILDERBACK

HS 491 Horticultural Science Seminar. *Preq: Junior/senior standing in horticultural science. May be taken only once for credit. 1(1-0) F.* Presentation of scientific articles, progress reports in research, and special problems in horticulture and related fields. Students are required to select a subject of their interest, with the approval of the instructor, and give one seminar during the semester. Each seminar is formally evaluated by all of the students. DeHERTOGH

HS (CS) 492 Topics in Plant Breeding. *1(0-2) S.* Plant breeding projects in the Department of Crop Science and Department of Horticultural Science at North Carolina State University are visited. The breeding objectives, hybridization methods, and the reproductive systems of field, fiber, forage, vegetable and/or fruit crops of North Carolina are discussed in relation to principles learned in CS 413 (Plant Breeding). EMERY

HS 495 Special Topics in Horticultural Science. *1-6 F,S,Sum.* Selected topics using an intensive literature review, independent study with instructor guidance; or new course development on a trial basis.

Selected 500-Level Courses Open To Advanced Undergraduates

HS 531 Physiology of Landscape Plants. *Preq: BO 421 or CI. 3(2-3) S.*

HS 532 Vegetable Crop Physiology. *Preqs: BO 421, HS 431, SSC 341. 2(2-0) F. Alt. yrs.*

HS 534 Vegetable Crops Practicum. *Preq: HS 431. 3(1-6) S. Alt. yrs.*

HS (FS) 562 Postharvest Physiology. *Preq: BO 421. 3(3-0) S.*

HS 595 Special Topics in Horticultural Science. *Preq: CI. 1-6 F,S,Sum.*

HS 599 Research Principles. *Preq: CI. Credits arranged, maximum 6.*

HUMANITIES AND SOCIAL SCIENCES

HSS 200 International Affairs Orientation. *1(2-0) S.* Survey of major issues and themes in international studies, designed to stimulate consideration of the interrelationships of issues and the impact of differing cultural values and institutions on the evolution and perception of these issues.

HSS 298 Special Topics in Humanities and Social Sciences. *1-6 F,S.* Interdisciplinary study of selected topics in the humanities and social sciences.

HSS 300 International Affairs Seminar. *Preq: HSS 200. 3(3-0) S.* An intensive study of selected international issues, each of which will be studied in terms of its global dimensions and implications.

HSS 400 Research Seminar in International Affairs. *Preq: HSS 300. 3(1-6) S.* A research seminar on individual topics. Reports will be presented to the seminar, and a research paper will be written for presentation to the Committee on International Studies and to the International Affairs Orientation Seminar.

HSS (ALS) 490 International Seminar. *Junior standing. 1(1-0) S.* (See Agriculture and Life Sciences.)

INDUSTRIAL ARTS

IA 111 Introduction to Industrial Arts. *1(1-0) F,S.* Designed to orient students to the philosophy, objectives and scope of Industrial Arts as related to teacher education and industrial employment. Orientation to microcomputers and their potential uses by teachers of industrial arts. CLARY

IA 115 Wood Processing I. *3(1-4) F,S,Sum.* Basic knowledge and skills needed to design and construct functional wood products. Includes a study of the tools, materials and processes used to machine, form, assemble and finish wood products. Laboratory activities in the design and construction of wood products. Teaching techniques are discussed.

DELUCA

IA 122 Metal Technology I. *3(1-4) F,S,Sum.* Introduction to metal layout, cutting, machining, forming, fabricating, finishing processes, and current technologies. Experience in oxyacetylene welding, arc welding, gas tungsten arc welding, sheet metals, bench metals, heat-treating, and foundry work.

IA 230 Arts and Crafts. *Preq: 3 hours in IA or consent of instructor. 3(1-4).* A survey of the handcraft process as a medium of expression. Opportunity for skill development in several areas such as wood carving, weaving, art metal, lapidary, bookbinding and block printing. Consideration of creative integration of craft instruction into a school curriculum, rehabilitation or recreation program. PETERSON

IA 231 Industrial Arts Design. *Preqs: GC 101 or GC 120, IA 115. 3(1-4) F.* Design and development of products and projects for the industrial arts laboratory. Class and laboratory exercises for future teachers of industrial arts dealing with a variety of materials in a diversity of design applications appropriate for the middle grades and secondary schools. TROXLER

IA 233 Metal Technology II. *Preq: IA 122. 3(1-4) F,S.* Advanced course in the machining and manufacturing of metals. Technical information and applications to a broad range of machine tools: lathes, milling machines, shapers, grinders. Special machine tool operations.

IA 246 Graphic Arts Technology. *3(1-4) F,S.* Introduction to graphic arts technology. Basic skills are developed through laboratory experiences in photography and the fundamental processes associated with offset lithography, letterpress, and screen printing. PETERSON

IA 351 General Ceramics. *3(1-4) F,S,Sum.* Work with ceramic materials as a medium of expression to gain experience in the basic manufacturing processes of the ceramic industry. A study of the sources of clay, and the designing, forming, decorating, and firing of ceramic products. TROXLER

IA 359 Electrical Technology I. *Preqs: MA 111, PY 212 or 221. 3(2-2) F.* Direct current, alternating current, and semiconductors. Measurement and circuit behavior. Experimentation with application circuits. HAYNIE

IA 360 Electrical Technology II. *Preq: IA 359. 3(2-2) F,S.* Continuation of electricity-electronics with special emphasis upon the application of electrical principles in consumer and industrial products. Each student is required to design, develop, and construct at least one product as a part of the laboratory experience. Fault analysis will be stressed. HAYNIE

IA 364 Wood Processing II. *Preqs: IA 115, GC 101 or 120. 3(1-4) F,S.* Machine processes, design processes and wood production/manufacturing systems. Laboratory activities develop problem-solving and creative skills, while providing experiences in designing wood products and manufacturing systems.

IA 368 Technical Drawing for Industrial Arts. *Preq: GC 101 or GC 120. 3(1-4) S.* A technical drawing skills course in sheet metal and architectural drawing. Practical house planning and emphasis on a knowledge of building trades and specifications as required of the industrial arts teacher. TROXLER

IA 382 General Shop. *Preq: 3 hours in IA or consent of instructor. 3(1-4).* Provides students with an opportunity to work in a multi-activity industrial arts laboratory. Introduces students to the general shop concept and to organizational principles and practices.

IA 476 Energy/Power Technology. *Preqs: MA 111, PY 221. 3(1-4) S.* Selected theoretical and practical aspects of energy/power technology. Energy/power topics include assessment of conventional and alternative sources, conserving and storing, definitions and measurement, conversion, and transmission and control. Emphasis on laboratory projects; experiments; and use and care of tools, equipment, and instruments. WENIG

IA 480 Modern Industries. *Preq: Junior standing. 3(3-0) S.* Overview of the development, function, and organization of modern industry. Effects of technological change on society, education, labor, management, and the consumer considered. PETERSON

IA 490 Special Problems in Industrial Arts. *Preqs: Junior level standing and permission of Instructor. F,S.* An independent supervised investigation in a defined area of interest in Industrial Arts.

Selected 500-Level Courses Open To Advanced Undergraduates

IA 510 Design for Industrial Arts Teachers. *Preqs: Six hours of drawing, IA 231 or equivalent. 3(2-2) Sum.*

IA 582 Visual Communications in Industrial Arts Education. *Preq: Advanced standing in industrial arts education or CI. 3(2-2) Alt. S.*

IA 590 Laboratory Problems in Industrial Arts. *Preqs: Sr. standing, CI. Maximum 6. F,S,Sum.*

IA 592 Special Problems in Industrial Arts. *Preq: One term of student teaching or equivalent. Maximum 6. F,S,Sum.*

INDUSTRIAL ENGINEERING

IE 100 Introduction to Industrial Engineering. *1(0-2) F,S.* Introduction to industrial and management engineering practice and concepts, including activity planning and control, human performance, resource allocation, operations improvement, and management systems. Illustrations of such functions in manufacturing, commercial, government or service organizations. Discussions and problems which relate to the design and operation of integrated systems of humans, machines, information and materials. Problem analysis, logic and application of the computer. W. SMITH

IE 241 Furniture Manufacturing Processes I. *Preq: E 240; Coreq: WPS 201. 3(3-0) S.* Survey of furniture manufacturing technology emphasizing mass production equipment and its relationship to furniture product engineering. CLARK

IE 307 Real-Time Control of Manufacturing Processes. *Preq: CSC 111. For IE, FMM and CSC majors and IE minors only. 3(2-2) F,S.* Introduction to the concepts of real-time control of manufacturing processes. System architecture, interface techniques, sensors and controls. An introduction to C as a language for manufacturing control and experience in the use of distributed computing resources. KING

IE 308 Control of Production and Service Systems. *Preqs: IE 361, ST 371. 3(3-0) S.* Planning and control of production and service systems. Production organization, flow and inventory control methods. Systems approach. HODGSON, NUTTLE

IE 311 Engineering Economic Analysis. *Preq: MA 102, MA 112 or MA 113. 3(3-0) F,S,Sum.* Engineering and managerial decision making. The theory of interest and its uses. Equivalent annual costs, present worths, internal rates of return, and benefit/cost ratios. Accounting depreciation and its tax effects. Economic lot size and similar cost minimization models. Sensitivity analysis. Cost dichotomies: fixed vs. variable, and incremental vs. sunk; use of accounting data. Replacement theory and economic life. Engineering examples. BERNHARD, CANADA, OLDHAM

IE 340 Furniture Manufacturing Processes II. *Preqs: IE 241, WPS 205; Coreq: ENG 321, IE 352. 4(2-6) F.* A survey of furniture manufacturing technology. Emphasis is on operations, production rates, and the integration of many types of equipment into a manufacturing system. PRAK

IE 341 Furniture Plant Layout and Design. *Preq: IE 340. 3(1-6) S.* Engineering design of an integrated furniture manufacturing system. Students do a layout project including equipment selection and location, materials handling methods, space utilization, and layout for operation and control. Additional topics include dust collection and safety. PRAK

IE 345 Principles of Upholstery. *Preq: IE 241. 2(2-0) F.* The upholstery industry through an examination of product function, frame design principles, upholstery constructions, material properties, and manufacturing processes. Special problems involved in upholstery merchandising, order processing, labor utilization, inventory control, and costing. CLARK

IE 346 Casegoods Manufacturing. *Preqs: IE 340, WPS 301. 2(2-0) S.* Selected topics in casegoods furniture design, construction, and manufacturing. Emphasizes panel construction, panel manufacturing, and finishing methods. Applications in knock-down furniture design. PRAK

IE 347 Furniture Manufacturing Facilities. *Preq: IE 241; Coreq: IE 340. 2(2-0) Alt.F.* Types and characteristics of furniture plant support systems: boiler operations, steam generation and distribution, wood waste handling and storage, electric power and compressed air distribution. Plant safety issues. EKWALL

IE 351 Manufacturing Engineering. *Preq: MAT 201, GC 101. For IE major and minors only. 3(2-3) F,S.* Analytical study and design of manufacturing processes. Emphasis on the economics, capabilities, and productivity of various processes in manufacturing, the interrelations of materials, processes and design with various aspects of manufacturing, and applications of new development in manufacturing, such as numerical control, robotics, and flexible manufacturing systems. BAO, SANII

IE 352 Work Analysis and Design. *Preq: ST 361, ST 371. 3(202) F,S.* Work methods and production processes to improve operator effectiveness and reduce production costs. Techniques studied include operation analysis, motion study, value engineering, predetermined time systems, time study and line balancing. C. SMITH

IE 355 Introduction to Occupational Safety & Health. *Preq: Soph. standing. 3(3-0) F.* Provides a basic understanding of safety and health practices of contemporary concern to the plant manager, safety engineer, etc. Emphasizes the applications of human factors, biomechanics, work physiology, toxicology, statistics, and engineering in accident prevention and control. Specific instruments used in the measurements of safety and health problems. AYOUB

IE 361 Deterministic Models in Industrial Engineering. *Preq: MA 303 or MA 405. For IE, ECE, and CSC majors and IE minors only. 3(3-0) F,S.* Introduction to mathematical modeling, analysis techniques, and solution procedures applicable to decision making problems in a deterministic environment. Linear programming models and algorithms and associated computer codes are emphasized. FATHI, NUTTLE

IE 371 Furniture Quality and Production Control. *Preqs: IE 307; ST 361; Coreq: IE 340. 4(3-3) F.* Quality control principles and applications. Forecasting, inventory control, production planning and scheduling, shop floor control. Organization of production control; use of computers. Examples from the furniture industry throughout. PRAK

IE 401 Stochastic Models in Industrial Engineering. *Preqs: ST 371; MA 303 or MA 405. For IE, ECE, and CSC majors and IE minors only. 3(3-0) F,S.* Introduction to mathematical modeling, analysis, and solution procedures applicable to decision making problems in an uncertain (stochastic) environment. Methodologies covered include dynamic programming, simulation, Markov chains, and classical optimization. Applications relate to problems such as inventory control, waiting lines, and system reliability and maintainability.

IE 420 Manufacturing Controls. *Preq: IE 311. 3(3-0) F,S.* Theory and methodology for developing and maintaining profitable manufacturing operations. Development of principles and procedures for control of materials, manpower and costs. Special attention to production and inventory control, equipment utilization, wage classification and cost reduction programs. EKWALL

IE 421 Information and Control Systems. *Preq: IE 307. For IE and CSC majors and IE minors only. 3(3-0) S.* Design of integrated management information systems, including both data base management and decision support systems. Definition of management requirements, feasibility assessment, system design and implementation. Computer team project. OLDHAM

IE 440 Furniture Management Analysis. *Preq: IE 301; IE 340. 3(1-4) F.* Economic decision making applied to the furniture industry. The selection of equipment, materials, methods and strategy from several feasible alternatives is studied with the aid of actual case histories. EKWALL

IE (CSC) 441 Introduction to Simulation. *Preqs: MA 202, ST 372, programming proficiency. 3(3-0) F.* Techniques and applications of simulation for problem solving, including random number generation, input data analysis, waiting lines, variance reduction techniques, model verification and validation, and output analysis. Use of a simulation language illustrates approaches for the study of systems. Problems of interest to scientists and engineers. Programming required.

BENGSTON, T. HONEYCUTT, PERROS, J. RICHARDS

IE 443 Quality Control. *Preq: ST 361. 3(2-2) F,S,Sum.* Statistical methods in quality control; control charts for variables and attributes; inspection sampling plans and procedures. Industrial applications.

PRAK

IE 452 Ergonomics. *Coreq: IE 352. For IE and FMM majors and IE minors only. 3(2-2) F,S.* Introduction to man-machine-environment systems design and evaluation; applications to consumer products, tools, equipment, and the workplace. Overview of ergonomic research methodologies. Consideration of man's anatomical, physiological, and psychological capabilities and limitations as related to systems design and human performance. Use of anthropometric data in design. Display and control systems design. Effects of environmental stress upon work performance, safety, and health.

AYOUB

IE 453 Facilities Design. *Preqs: IE 351, IE 352. 3(2-2) F,S.* Principles and practice in layout and material handling planning for industrial/service facilities. Integration of product and process and functional design of facilities. Computer software to optimize economic objectives. Group projects.

CANADA

IE 472 Quantitative Methods in Furniture Manufacturing. *Preqs: IE 311; IE 340; IE 371. 4(3-2) S.* Quantitative methodologies for problem solving in furniture manufacturing operations. Deterministic and stochastic models, linear programming, decision theory, waiting line models, and computer simulation. Applications in resource allocation, production planning and control, project scheduling, systems analysis, and facilities design. Emphasis on computer-based problem solving.

CULBRETH

IE 481 Engineering Economics (Mini). *Preq: Senior standing and MA 201. Not for IE, CE, EO, and FMM undergraduates or anyone having received credit for IE 301, IE 311 or equivalent. 1(3-0) S.* Time value of money concepts applied to economic comparison of investment and operating alternatives by equivalent annual worth, present worth, and rate of return methods. This course is presented at a rapid-pace during one-third of a semester.

CANADA, BERNHARD

IE 482 Work Methods and Measurement (Mini). *Preq: Senior standing and CI. Not for EO, IE and FMM undergraduates or anyone having received credit for IE 332 or equivalent. 1(3-0) F.* Review of classical industrial engineering activities: Systematic approach to work design and work measurement including methods analysis, classical time study techniques, and work sampling. This course is presented at a rapid-pace during one-third of a semester.

C. SMITH

IE 485 Manufacturing Engineering (Mini). *Preq: Senior standing and CI. Not for IE and EO undergraduates or students who have taken MAT 400 or MAT 423. 1(3-0) F,S.* Manufacturing concepts stressing the interrelationship of materials and the processes that are used to develop finished products, with emphasis on metals. This course is presented at a rapid-pace during one-third of a semester.

BAO

IE 487 Information Systems (Mini). *Preq: Senior standing and computer programming course. Not for IE or FMM undergraduates or other students having received credit for IE 307 or equivalent. 1(3-0) F.* An introduction to the generation, flow, processing, reporting and use of business information. System design and development, procedure design and documentation, role of user in system design and use of information. This course is presented at a rapid-pace during one-third of a semester.

JOOST

IE 488 Production and Inventory Control (Mini). *Preq: Senior standing and CI. Not for IE and FMM undergraduates. 1(3-0) F.* An overview of production and inventory control including brief coverage of forecasting, scheduling, expediting, materials requirement planning (MRP). This course is presented at a rapid-pace during one-third of a semester.

PRAK

IE 489 Labor Relations for Engineers (Mini). *Preq: Senior standing and CI. Industrial employment experience highly desirable (full time, co-op or summer). 1(3-0) F,S.* Discussion of problems and constraints faced by engineers or managers in the operation of unionized facilities. Labor agreement provisions, grievance and arbitration procedures. This course is presented at a rapid-pace during one-third of a semester. **CARSON**

IE 490 Special Topics in Industrial Engineering. *Preq: Junior or senior standing and CI. 1-3.* Generally used for the first offering of a new course, using conventional lecture format. Sometimes used for directed readings, problem sets, written and oral reports as required.

IE 495 Project Work in Industrial Engineering. *Preq: Sr. standing. 1-6 F,S.* Special investigations, study or research related to the fields of industrial engineering or furniture manufacturing and management. In a given semester several students and/or student groups may be working in widely divergent areas under the direction of several members of the faculty.

IE 498 Senior Design Project. *Preqs: IE 308, 311, 441, 443, 452, 453. For Industrial Engineering majors only. 3(3-0) F,S.* Individual or group design projects requiring problem definition and analysis, synthesis, specification and presentation of a designed solution. Students work under faculty supervision either on actual industrial engineering problems posed by local industrial, service and governmental organization or on emerging research issues. **HODGSON**

Selected 500-Level Courses Open To Advanced Undergraduates

IE (MA, OR) 505 Linear Programming. *Preq: MA 405. 3(3-0) F,S.*

IE (OR) 509 Dynamic Programming. *Preqs: MA 405, ST 421. 3(3-0) S.*

IE 511 Capital Investment Economic Analysis. *Preqs: IE 311, ST 371. 3(3-0) F.*

IE 512 Bayesian Decision Analysis for Engineers and Managers. *Preq: ST 371 or ST 421. 3(3-0) F.*

IE 515 Advanced Manufacturing Processes. *Preqs: IE 351 and EE 331 or equivalent. 3(3-0) F.*

IE 516 CAM I: A Systemic Approach to Computer Aided Manufacturing. *Preq: IE 351 or 485. 3(3-0) F.*

IE 518 Manufacturing Operations Management. *Preqs: MA 202 or MA 212; ST (EB) 350 or ST 372. 3(3-0) F.*

IE (MAE) 520 Industrial Robotics. *Preqs: IE 351 or 485; MA 301 or 303, 3(3-0) F.*

IE 521 Management Decision and Control Systems. *Preqs: IE 421, CSC 421 or equivalent. 3(3-0) S.*

IE 525 Organizational Planning and Control. *Preqs: Three credit hours in operations management (such as EB 325, IE 308). 3(3-0) S.*

IE (PSY) 540 Human Factors in Systems Design. *Preq: IE 452; Coreq: ST 507 or 515. 3(3-0) F.*

IE 541 Systems Safety Engineering. *Preqs: IE 452, ST 371. 3(3-0) S.*

IE 547 Reliability and Quality Assurance. *Preq: One of the following: IE 308, IE 371, ST 421 or ST 515. 3(3-0) S.*

IE 553 Materials Handling Systems. *Preq: IE 453. 3(3-0) S.*

IE 556 Industrial Logistics. *Preq: IE 453. 3(3-0) F.*

IE (OR) 561 Queues and Stochastic Service Systems. *Preq: MA 421. 3(3-0) F.*

IE (CSC, CSE, ECE) 575 Voice Input/Output Communication Systems. *Preqs: MA 202 and IE 307 or CSC 312. 3(3-0) F.*

IE (MA, OR) 586 Network Flows. *Preq: IE (OR, MA) 505 or equivalent. 3(2-2) S.*

IE 589 Special Topics in Industrial Engineering. *Preq: Grad. or sr. standing and CI. 1-4.*

LANDSCAPE ARCHITECTURE

(Also see DN—Design.)

LAR 400 Intermediate Landscape Architecture Design (Series). *Preqs: School of Design majors: DF 102; Horticulture Science-Landscape Technology Option majors: DN 234. LAR 400 may not be taken more than six times. 6(0-9) F,S.* This series of studio courses covers small scale design, urban landscape architecture, public and institutional design. The problems of project organization, design and execution will be studied in each course. Students select from a number of vertically organized workshop studio which offer on an optional basis a wide range of program emphases.

Selected 500-Level Courses Open To Advanced Undergraduates

LAR 512 Landscape Resource Management. *Preq: DN 431 or CI. 3(1-4) S.*

LAR 530 Advanced Site Planning. *Preqs: DN 257, DN 430. 3(2-2) S.*

LAR 533 Plants and Design. *3(2-2) Every yr.*

LAR 564 Management and Marketing Techniques in Community Design. *3(3-0) S. Alt. yrs.*

LATIN LANGUAGE AND LITERATURE

Note: All students with previous knowledge of French, German, Latin, or Spanish must take the placement test upon entering the University. They will be given advanced standing and receive credit according to their score.

LAT 101 Elementary Latin I. *3(3-0) F.* Beginning course in Classical Latin, emphasizing elementary grammatical form and basic syntax. Readings based on brief selections from Roman authors, including Cicero and Catullus.

LAT 102 Elementary Latin II. *Preq: LAT 101. 3(3-0) S.* A second course in Classical Latin, continuing and expanding the work of Latin 101. Completes study of grammar. Readings from a variety of Latin texts, in particular Livy Book I.

LAT 201 Intermediate Latin I. *Preq: LAT 102. 3(3-0) F.* Introduction to Latin prose and poetry. Emphasis on increased reading skill. Review of grammar fundamentals and exposure to new and more complex syntax. Examination of cultural significance of readings.

LAT 202 Intermediate Latin II. *Preq: LAT 201. 3(3-0) S.* A study of the lyric poetry of Catullus and Horace emphasizing vocabulary, syntax, and techniques of Latin verse. The traditions and the evolution of lyric poetry and the social role of the Roman poet are discussed.

LAT (GRK) 310 Classical Mythology. *3(3-0)S.* (See Greek Language and Literature.)

MATHEMATICS

MA 100 Precalculus Trigonometry. *Credit is not allowed for both MA 100 and MA 111. For students in Engineering, Physical and Mathematical Sciences, Design, Biological and Agricultural Engineering (Science Program), Biological Sciences (all Options), Mathematics Education, and Science Education, credit in MA 100 does not count toward graduation requirements. 2(2-0) F,S.* Basic topics from plane trigonometry which are needed for the study of calculus: angles, right triangles, trigonometric functions, graphs, identities, inverse functions, trigonometric equations, laws of sines and cosines.

MA 102 Analytic Geometry and Calculus I. *Preq: MA 111 or equivalent completed in high school. Credit is not allowed for more than one of MA 102, 112, 113. 4(4-1) F,S,Sum.* First of three semesters of unified analytic geometry and calculus course. Functions and graphs, limits, derivatives of algebraic functions and applications, indefinite integral, definite integral and the fundamental theorem of calculus, areas and volumes, plane analytic geometry.

MA 111 Algebra and Trigonometry. *Credit is not allowed for both MA 100 and MA 111. For students in Engineering, Physical and Mathematical Sciences, Design, Biological and Agricultural Engineering (Science Program), Biological Sciences (all Options), Mathematics Education, Textiles, and Science Education, credit in MA 111 does not count toward graduation requirements. 4(3-2) F,S,Sum.* Sets and logic, the real number system, polynomials, algebraic fractions, exponents and radicals, linear and quadratic equations, inequalities, functions and relations, logarithms, plane trigonometry.

MA 112 Analytic Geometry and Calculus A. *Preq: MA 111 or equiv. completed in high school. Credit not allowed for more than one of MA 102, 112, 113. 4(4-0) F,S,Sum.* Limits and derivatives, techniques of differentiation, applications, logarithms, exponential and trigonometric functions, higher derivatives, definite integral, applications, integration techniques, examples and applications in biological and behavioral sciences and economics.

MA 113 Elements of Calculus. *Preq: MA 111 or equiv. completed in high school. Credit is not allowed in more than one of MA 102, 112, 113. MA 113 may not be substituted for MA 102 as a curricular requirement. 4(4-0) F,S,Sum.* For students who require only a single semester of calculus. Emphasis on concepts and applications, along with basic calculus skills. Topics include—algebra review, functions, graphs, limits, derivatives, integration, logarithmic and exponential functions, functions of several variables, applications in biological and social sciences.

MA 114 Introduction to Finite Mathematics with Applications. *Preq: MA 111 or equivalent completed in high school. 3(3-0) F,S,Sum.* Elementary matrix algebra—addition and multiplication, inverses, systems of linear equations; introduction to linear programming including simplex method; sets and counting techniques; elementary probability—probability measures, conditional probability; Markov chains; applications in the behavioral, managerial and biological sciences.

MA 115 Basic Algebra. *Credit for MA 115 is not allowed if student has prior credit in any other mathematical course. MA 115 may not be counted as credit toward meeting requirements. 4(5-0) F,S,Sum.* Preparation for MA 111 and MA 116. Basic concepts and skills of algebra including algebraic operations, factoring, linear equations, functions, graphs exponents and radicals, complex numbers, quadratic equations, radical equations, inequalities.

MA 116 Topics in Contemporary Mathematics. *Preqs: MA 115 or equivalent completed in high school. Credit for MA 116 is not allowed if student has prior credit in MA 102, 112, 113 or 114. 3(3-0) F,S,Sum.* Primarily for students in Humanities and Social Sciences. Course presents a collection of topics illustrating contemporary uses of mathematics, which may vary from one semester to another. Common offerings include selections from logic, counting procedures, probability, modular arithmetic, matrices, cryptography, mathematics of finance and game theory.

MA 122 Mathematics of Finance. *Preq: MA 115 or equivalent completed in high school. 3(3-0) F,S,Sum.* Simple and compound interest, annuities and their application to amortization and sinking fund problems, installment buying, calculation of premiums of life annuities and life insurance.

MA 201 Analytic Geometry and Calculus II. *Preq: MA 102. 4(4-0) F,S,Sum.* Second of three semesters of unified analytic geometry and calculus course. Applications of definite integral. Transcendental functions, methods of integration, polar coordinates, parametric equations, brief introduction to determinants and matrices.

MA 202 Analytic Geometry and Calculus III. *Preq: MA 201. 4(4-0) F,S,Sum.* Third of three semesters of unified analytic geometry and calculus course. Introduction to infinite series, vector functions, analytic geometry of three dimensional space and partial differentiation, multiple integration, applications. Line integral and Green's Theorem.

MA 212 Analytic Geometry and Calculus B. *Preq: MA 112. 3(3-0) F,S,Sum.* Multivariate calculus-partial derivatives, multiple integrals, applications; sequences, series, and Taylor's Theorem; differential equations; difference equations; examples and applications in biological and behavioral sciences and economics.

MA 214 Elementary Probability. *Preq: MA 112, 113 or 102. 3(3-0) S.* Sample spaces, events, and probabilities; elementary counting procedures; conditional probability; discrete random variables—probability functions and expected values; normal random variables and density functions; examples and applications in biological, management, and behavioral sciences.

MA 225 Structure of the Real Number System. *Preq: MA 201. 3(3-0)F,S.* Introduction to mathematical proof with focus on properties of the real number system. Elementary symbolic logic, mathematical induction, algebra of sets, relations, functions, countability, algebraic and completeness properties of the reals with applications to elementary probability theory.

MA 301 Applied Differential Equations I. *Preq: MA 202. 3(3-0) F,S,Sum.* First order differential equations, applications, linear equations of higher order, applications in mechanics and other areas, Laplace transforms, systems of linear equations and their applications.

MA 302 Numerical Applications to Differential Equations. *Preq: CSC 101 or CSC 111; Coreq: MA 301. 1(1-0) F,S.* Several numerical methods for obtaining approximate solutions for differential equations. Included are series and Runge-Kutta methods. Applications made to problems involving systems of non-linear differential equations.

MA 303 Linear Analysis. *Preq: MA 202; Coreq: ST 361. Credit not allowed if credit has been obtained for MA 301 or MA 405. 3(3-0) S.* Linear equations of first and second order, compound interest and amortization; differential equations of first and second order, growth and decay problems, population growth; matrix and vector algebra, simultaneous equations, eigenvalues, diagonalization, systems of difference and differential equations, population problems and Markov chains.

MA (CSC) 322 Discrete Mathematical Structures. *Preq: MA 202; Coreq: CSC 311. 3(3-0) F,S.* (See Computer Science.)

MA 401 Applied Differential Equations II. *Preq: MA 301. Credit for both MA 401 and MA 501 will not be given. 3(3-0) F,S,Sum.* The wave, heat and Laplace equations. Solutions by separation of variables and expansion in Fourier Series or other appropriate orthogonal sets. Introduction to methods for solving some classical partial differential equations. Use of power series as a tool in solving ordinary differential equations.

MA (PHI) 402 Advanced Logic. *Preq: PHI 335 or CI. 3(3-0) S.* The formal study of truth and provability. Develops the basic results of mathematical logic by studying systems of formal logic in a mathematically rigorous way and by investigating one or more of the mathematical topics which rely on results from logic. Examples are the theory of the hyperreal number system (non-standard analysis) and the theory of computability (recursive function theory).

MA 403 Introduction to Modern Algebra. *MA 225. Credit is not allowed for both MA 403 and MA 403M. 3(3-0) F,S,Sum.* Sets and mappings, equivalence relations, rings, integral domains, ordered integral domains, ring of integers. Other topics selected from fields, polynomial rings, real and complex numbers, groups, permutation groups, ideals, and quotient rings.

MA 403M Introduction to Modern Algebra for Mathematics Majors. *Preq: MA 225. Credit is not allowed for both MA 403 and MA 403M.* Elementary number theory, equivalence relations, groups, homomorphisms, cosets, Cayley's Theorem, symmetric groups, rings, polynomial rings, quotient fields, principal ideal domains, Euclidean domains.

MA 405 Introduction to Linear Algebra and Matrices. *Preq: One year of calculus. 3(3-0) F,S,Sum.* Linear equations, linear dependence and vector spaces, inner products, linear transformations and matrices, operations with matrices, determinants, eigenvalues and reduction of matrices to diagonal forms with applications to differential equations. (A special section, MA 405M, is given for mathematics majors.)

MA 408 Foundations of Euclidean Geometry. *Preq: MA 403. 3(3-0) S.* A critique of Euclid's Elements, incidence and order properties, congruence of triangles, absolute and non-Euclidean geometry, the parallel postulate, real numbers and geometry.

MA 410 Theory of Numbers. *Preq: One year of calculus. 3(3-0) S.* Arithmetic properties of integers. Congruences, arithmetic functions, diophantine equations. Other topics chosen from quadratic residues, the quadratic reciprocity Law of Gauss, primitive roots, and algebraic number fields.

MA 414 Introduction to Differential Geometry. *Preqs: MA 202 and MA 405. 3(3-0) S.* Introduction to the geometry of curves and surfaces from a modern point of view; calculus in Euclidean spaces, differential forms, frame fields, connections, calculus on surfaces as manifolds, integration of forms, curvatures, isometries, orientations, geodesics.

MA (CSC) 416 Introduction to Combinatorics. *Preqs: MA 202 and proficiency in a programming language. 3(3-0) S. Alt. yrs.* Problems of enumeration, distribution and arrangement, inclusion-exclusion principle, recurrence relations, generating functions, difference equations, combinatorial identities, graphs, trees, digraphs, systems of distinct representatives, matching problems, and optimization. Applications from computer science, operations research, and natural sciences.

MA 421 Introduction to Probability. *Preq: MA 202 or MA 212. 3(3-0) F,S,Sum.* Axioms of probability, conditional probability, combinatorial analysis, random variables, expectation, simple stochastic processes.

MA 425 Mathematical Analysis I. *Preq: MA 202 (403 desirable). 3(3-0) F,S.* Real number system, functions and limits, topology on the real line, continuity, differential and integral calculus for functions of one variable. Infinite series, uniform convergence.

MA 426 Mathematical Analysis II. *Preqs: MA 425 and 405. 3(3-0) S.* Calculus of several variables, topology in n -dimensions, limits, continuity, differentiability, implicit functions, multiple integrals, line and surface integrals.

MA (CSC) 427 Introduction to Numerical Analysis I. *Preqs: MA 301 and programming language efficiency. 3(3-0) F.* Theory and practice of computational procedures using a digital computer, including approximation of functions by interpolating polynomials, numerical differentiation and integration, and solution of ordinary differential equations including both initial value and boundary value problems. Computer applications and techniques.

MA (CSC) 428 Introduction to Numerical Analysis II. *Preqs: MA 405 and programming language proficiency. MA (CSC) 427 is not a prerequisite. 3(3-0) S.* Computational procedures using digital computers. Solution of linear and nonlinear equations, matrices and eigenvalue calculations, curve fitting and function approximation by least squares, smoothing functions, and minimax approximations.

MA 430 Mathematical Models in the Physical Sciences. *Preqs: MA 301 and MA 405. 3(3-0) F.* Techniques for formulating and analyzing mathematical models in physical sciences. Models selected from such areas as motion problems, vibrations, dynamical systems, control theory, diffusion, crystallography, and coding theory.

MA 432 Mathematical Models in Life Sciences and Social Sciences. *Preqs: MA 301, MA 405. Coreq: MA 421 or ST 371. 3(3-0) S.* Mathematical modeling in the life sciences and social sciences, built around general concepts such as growth modeling (e.g. population growth) to which many different mathematical techniques may be applied (e.g. differential equations, probability, linear algebra).

MA 433 History of Mathematics. *Preq: One year of calculus. 3(3-0) F,S.* Development of mathematical thought and evolution of mathematical ideas examined in a historical setting. Biographical and historical content supplemented and reinforced by study of techniques and procedures used in earlier eras.

MA 491 Reading in Honors Mathematics. *Preq: Membership in honors program, consent of department. 2-6 F,S.* A reading (independent study) course available as an elective for students participating in the departmental honors program.

MA 493 Special Topics in Mathematics. *Preq: Consent of department. 1-6.* Directed individual study or experimental course offerings.

Selected 500-Level Courses Open To Advanced Undergraduates.

MA 501 Advanced Mathematics for Engineers and Scientists I. *Preq: MA 301 or equivalent. Credit for this course and MA 401 is not allowed. 3(3-0) F,S,Sum.*

MA 502 Advanced Mathematics for Engineers and Scientists II. *Preq: MA 301 or equivalent. Any student receiving credit for MA 502 may receive credit for, at most, one of the following: MA 405, MA 512, MA 513. 3(3-0) F,S,Sum.*

MA (IE, OR) 505 Linear Programming. *Preq: MA 405. 3(3-0) F,S.*

MA 511 Advanced Calculus I. *Preq: MA 301. May not be taken for credit by undergrad. mathematics majors. 3(3-0) F,S,Sum.*

MA 512 Advanced Calculus II. *Preq: MA 301. 3(3-0) F,S,Sum.*

MA 513 Introduction to Complex Variables. *Preq: MA 202. 3(3-0) F,S,Sum.*

MA 514 Methods of Applied Mathematics. *Preq: MA 511 or 425. 3(3-0) S.*

MA 515 Linear Functional Analysis I. *Preq: MA 426. 3(3-0) F.*

MA 517 Introduction to Topology. *Preq: MA 426. 3(3-0) F.*

MA 518 Calculus on Manifolds. *Preq: MA 426. 3(3-0) S.*

MA 520 Linear Algebra. *Preq: MA 405. 3(3-0) F.*

MA (E, OR) 531 Dynamical Systems and Multivariable Control. *Preqs: MA 301, 405 or equivalent. 3(3-0) F.*

MA 532 Theory of Ordinary Differential Equations. *Preqs: MA 301, 405, advanced calculus. 3(3-0) S.*

MA 534 Introduction to Partial Differential Equations. *Preqs: MA 425 or MA 511, MA 301. 3(3-0) F.*

MA (CSE) 536 Theory of Sequential Machines. *Preq: CSC 412 or grad. standing. 3(3-0) F.*

MA (CSE) 537 Theory of Computability. *Preq: CSC 412 or grad. standing. 3(3-0) S.*

MA (ST) 541 Theory of Probability I. *Preq: MA 425 or 511. 3(3-0) F,Sum.*

MA 545 Set Theory and Foundations of Mathematics. *Preq: MA 403. 3(3-0) S.*

MA (PY) 555 Mathematical Introduction to Celestial Mechanics. *Preq: MA 301. 3(3-0) F.*

MA (PY) 556 Orbital Mechanics. *Preqs: MA 301, 405, knowledge of elementary mechanics and computer programming. 3(3-0) S.*

MA (BMA, ST) 571 Biomathematics I. *Preq: Advanced calculus, reasonable background in biology or CI. 3(3-0) F.*

MA 581 Special Topics. *Preq: Consent of department. 1-6 F,S.*

MA (CSC) 582 Numerical Linear Algebra. *Preqs: MA 405 or equivalent and a knowledge of computer programming. 3(3-0) F.*

MA (CSC) 583 Numerical Solution of Ordinary Differential Equations. *Preq: Knowledge to the level of CSC 427. 3(3-0) S.*

MA (CSC, OR) 585 Graph Theory. *Preq: MA 405. 3(3-0) F.*

MECHANICAL AND AEROSPACE ENGINEERING

MAE 206 Engineering Statics. *Preq: PY 205; Coreq: MA 202. 3(3-0) F,S,Sum.* Basic concepts, forces and equilibrium, distributed forces, frictional forces, inertial properties, application to machines, structures, and systems.

MAE 208 Engineering Dynamics. *Preq: MAE 206; Coreq: MA 301. 3(3-0) F,S,Sum.* Equations of motion; kinematics, kinetics of mass points and systems of mass points; kinetics and kinematics of rigid bodies.

MAE 250 Introduction to the Airplane and Its Operation. *Preq: Sophomore standing. Not acceptable as departmental elective in Mechanical or Aerospace Engineering. 3(3-0) F.* A presentation of why airplanes look and fly as they do. Theory of flight and aircraft control, factors affecting aircraft operations and aerial navigation. Includes field trips to maintenance, control and flight facilities at regional airports.

MAE 261 Aerospace Vehicle Performance. *Preqs: MA 201, PY 205. 3(3-0) S,Sum.* Introduction to the problem of performance analysis in aerospace engineering. Aircraft performance in gliding, climbing, level and turning flight. Calculation of vehicle take-off and landing distance, range and endurance.

MAE 301 Engineering Thermodynamics I. *Preqs: MA 202, PY 208 or 202. 3(3-0) F,S,Sum.* Introduction to the concept of energy and the laws governing the transfers and transformations of energy. Emphasis on thermodynamic properties and the First and Second Law analysis of systems and control volumes. Integration of these concepts into the analysis of basic power cycles introduced.

MAE 302 Engineering Thermodynamics II. *Preq: C or better in MAE 301. 3(3-0) F,S,Sum.* Continuation of Engineering Thermodynamics I with emphasis on the analysis of power and refrigeration cycles and the application of basic principles to engineering problems with systems involving mixtures of ideal gases, psychrometrics, nonideal gases, chemical reactions, combustion, chemical equilibrium, cycle analysis and one-dimensional compressible flow.

MAE 305 Mechanical Engineering Laboratory I. *Preq: Junior standing in ME. 1(0-3) F,Sum.* Theory and practice of measurement and experimental data collection. Laboratory evaluation and demonstration of components of the generalized measurement system and their effects on the final result. Applications of basic methods of data analysis as well as basic instrumentation for sensing, conditioning and displaying experimental qualities.

MAE 306 Mechanical Engineering Laboratory II. *Preqs: MAE 305. 1(0-3) S,Sum.* Continuation of MAE 305 into specific types of measurements. Students evaluate and compare different types instrumentation for measuring the same physical quantity on the basis of cost, time required, accuracy, etc.

MAE 308 Fluid Mechanics. *Preqs: CE 213 or MAE 206; MA 202. 3(3-0) F,S,Sum.* Development of the basic equations of fluid mechanics in general and specialized form. Application to a variety of topics including fluid statics, inviscid, incompressible fluid flow; and viscous, incompressible fluid flow.

MAE 310 Conduction and Radiation Heat Transfer. *Preqs: MA 301 and a grade of C or better in MAE 301. 3(3-0) F,S,Sum.* The analysis of steady state and transient one and multidimensional heat transfer by conduction, employing both analytical methods and numerical techniques, make up the first half of the course. The remainder of the semester is devoted to heat transfer by the mechanism of radiation.

MAE 314 Solid Mechanics. *Preqs: MAE 206, CE 213 or CE 214; Coreq: MAT 201. 3(3-0) F,S,Sum.* Stress, strain and constitutive laws; application to axial, torsional, and bending stress and deformation; analysis of mechanical components and their strength based on material behavior under static loading conditions.

MAE 315 Dynamics of Machines. *Preqs: A grade of C or better in MAE 208 and a junior standing in ME. 3(3-0) F,S,Sum.* Application of dynamics to the analysis of machines and mechanical devices. Motions resulting from applied loads and the forces and inputs required to produce specified motions.

MAE 316 Strength of Mechanical Components. *Preq: MAE 314, students in ME, AE, NE only. 3(3-0) F,S,Sum.* The study and prediction of the strength of mechanical components based on material behavior under static and dynamic operations conditions. Applications to typical machine components including fasteners, welded joints, springs, curved and composite beams, thick-walled cylinders, stepped shafts, etc. Statistical considerations in design are also included.

MAE 345 Acoustics of Music. *Preq: Junior standing. 3(3-0).* The acoustical aspects of the production of musical sounds and perception by ear as related to design of musical instruments. Involves a non-mathematical approach to sound production supported by laboratory demonstrations.

MAE 355 Aerodynamics I. *Preqs: MAE 261, MA 301. 3(3-0) F.* Fundamentals of perfect fluid theory with applications to incompressible flows over airfoils, wings, and flight vehicle configurations.

MAE 356 Aerodynamics II. *Preqs: MAE 355 and a grade of C or better in MAE 301. 3(3-0) S.* Concepts of thermodynamics, compressible fluid flow, and shock waves with application to computing the aerodynamic characteristics of airfoils, wings and flight configurations at high speed.

MAE 357 Aerodynamics I Laboratory. *Preqs: MAE 261, MA 301; Coreq: MAE 355. 1(0-3) F.* Introduction to the subsonic wind tunnel, instrumentation techniques for performing experiments, and reporting of information. Experiments involve pressure and force measurements on complete, and components of, aerospace vehicles.

MAE 358 Aerodynamics II Laboratory. *Preq: MAE 357; Coreq: MAE 356. 1(0-3) S.* Introduction to the supersonic wind tunnel, instrumentation techniques for performing experiments, and reporting of information. Experiments involve pressure and force measurements on supersonic configurations.

MAE 365 Propulsion I. *Preqs: MAE 355 and a grade of C or better in MAE 301. 3(3-0) S.* One dimensional internal flow of compressible fluids including: isentropic flow, normal shocks, flow with friction, simple heat addition. Applications to air-breathing aircraft propulsion systems and overall performance of air-breathing engines.

MAE 371 Aerospace Vehicle Structures I. *Preqs: MAE 261, MAE 314. 3(3-0) F.* Determination of typical flight and landing loads. Use of the determined loads for analysis of typical aircraft structure. Analysis concepts required for the analysis of aircraft structural members.

MAE 403 Air Conditioning. *Preq: MAE 302. 3(3-0) F.* Fundamentals involved in the design of summer and winter air conditioning systems. Psychrometrics; load calculations; piping arrangements and sizing; duct layout and sizing; energy sources and diseminators; performance and selection of pumps and fans.

MAE 404 Refrigeration. *Preq: MAE 302. 3(3-0) S.* Thermodynamic analysis of the vapor compression cycle; optimization of multiple evaporator and multiple compressor systems; commercial refrigeration load calculations; desirable properties of refrigerants and brines, piping arrangement and sizing.

MAE 405 Mechanical Engineering Laboratory III. *Preq: MAE 306. 1(0-3) F,S.* Final undergraduate course in mechanical engineering laboratory sequence. Experimental investigation of measurement problems involving typical mechanical engineering equipment systems. Design and application of a measurement system to a specific problem.

MAE 406 Energy Conservation in Industry. *Preqs: MAE 301 or 307. Junior or senior status in Engineering. 3(2-3) S.* The application of energy conservation principles to a broad range of industrial situations. Topics to be covered include electrical energy consumption, heat recovery, steam traps, boilers, insulation, compressed air, heating, ventilation, air conditioning, instrumentation, and measurement. Student participation on field trips to local industry focusing on identifying energy conservation opportunities and measuring energy losses.

MAE 407 Steam and Gas Turbines. *Preqs: MAE 302; 308 or MAE 355. 3(3-0) S.* Fundamental analysis of the theory and design of turbo machinery flow passages; control and performance of turbomachinery; gas-turbine engine processes.

MAE 408 Internal Combustion Engine Fundamentals. *Preq: MAE 302. 3(3-0) F.* Fundamentals common to internal combustion engine cycles of operation. Otto engine: carburetion, combustion, knock, exhaust emissions and engine characteristics. Diesel engine: fuel metering, combustion, knock, and performance. Conventional and alternative fuels used in internal combustion engines.

MAE 409 Particulate Control in Industrial Atmospheric Pollution. *Preq: MAE 301 or equivalent. 3(3-0) F.* Combustion calculations and analysis of particulate emission and gases from industrial and utility power stations burning various types of fuel. State and Federal pollution codes, requirements for compliance and enforcement. Calculations and design of industrial equipment. Utilization of waste products.

MAE 410 Convective Heat Transfer and Fluid Flow. *Preqs: MAE 301, MAE 308. 3(3-0) F,S.* An integration of the principles and concepts of thermodynamics, fluid mechanics and heat transfer to the development of practical convective heat transfer and mass transport relations relevant to mechanical engineering. Typical applications emphasized include boilers, condenser, piping, pumps, and heat exchangers.

MAE 411 Machine Component Design. *Preqs: MAE 315, MAE 316. 3(3-0) F.* Application of the principles of solid mechanics and material science to the analysis and design of specific machine components including screws, bearings, gears, transmission devices, brakes, clutches, couplings, fly wheels, cams, etc.

MAE 412 Energy Systems. *Preqs: MAE 302, MAE 410 and senior standing in ME. 3(3-0) F,S.* A study of the application of thermodynamics, fluid mechanics, heat transfer, and combustion to power generation in mechanical engineering, energy systems. Topics covered include energy demands and generation economics, conventional conversion methods, power plant components, advanced power plants, and alternative energy sources. Both analysis and synthesis aspects are emphasized.

MAE 415 Mechanical Engineering Analysis. *Preqs: MAE 302, 315, 316, ECE 331, and senior standing in ME. 3(3-0) F,S.* A logical method of problem solving through the integration of the physical sciences, engineering sciences and mathematics. Training in methods of analysis of real mechanical engineering problems.

MAE 416 Mechanical Engineering Design. *Preqs: MAE 302, 315, 316, ECE 331, and senior standing in ME. 4(3-2) F,S.* Applying engineering and materials sciences to the total design of mechanical engineering components and systems. Consideration of the design process including feasibility study, preliminary detail design, cost effectiveness over life of system along with development and evaluation of prototype through design team project activity.

MAE 421 Principles of Solar Engineering. *Preqs: A grade of C or better in MAE 301, MAE 308, senior standing in engineering. 3(3-0) S.* Principles of solar radiation, heat transfer and fluid mechanics as applied to the utilization of solar energy. A study of active and passive systems, thermal storage and energy conversion devices. Component and system design for active and passive systems along with methodologies for economic evaluation.

MAE 431 Thermodynamics of Compressible Fluid Flow. *Preqs: MAE 301, 308, MA 301. 3(3-0) S.* Application of one-dimensional compressible gas dynamics and perfect gas theory to analyze nozzle and diffuser flows, normal shocks, and constant-area frictional flows with and without heat transfer.

MAE 435 Principles of Automatic Control. *Preq: MA 301. 3(3-0) F,S.* Study of linear feedback control systems using transfer functions. Transient and steady-state responses. Stability and dynamic analyses using root locus and frequency response techniques (Bode plots and Nyquist diagrams). Active and passive compensation methods. Applies classical control theory techniques to determination and modification of the dynamic response of a system. Applications to typical mechanical and aerospace engineering control systems.

MAE 442 Automotive Engineering. *Preq: Senior in MAE. 3(3-0) S.* Fundamental aspects of automotive engineering. Examines various automotive systems (engine, brakes, etc.) as well as their interactions in such areas as safety and performance. Current practices and development for the future.

MAE 452 Aerodynamics of V/STOL Vehicles. *Preq: MAE 356. 3(3-0).* Introduction to the aerodynamics and performance of vertical and short take-off and landing vehicles. High lift devices. The aerodynamics of propellers and rotors. Helicopter aerodynamics.

MAE 453 Introduction to Space Flight. *Preq: PY 205; MA 301 or MA 303. 3(3-0) F.* Fundamental aspects of space flight: applications of two-body orbital mechanics including earth satellites, orbital and interplanetary transfers and velocity budgets; the solar system; propulsion system characteristics; space vehicle and booster performance, sizing, and staging; and atmospheric reentry.

MAE 455 Boundary Layer Theory. *Preq: MAE 355. 3(3-0) F.* Introduction to the Navier-Stokes Equations and boundary layer approximations for incompressible flow. Calculation techniques for laminar and turbulent boundary layer parameters which affect lift, drag, and heat transfer on aerospace vehicles. Discussions of compressible flows.

MAE 456 Computational Methods in Aerodynamics. *Preqs: CSC 302 and MAE 455. 3(3-0) Alt. S.* Introduction to computational methods for solving exact fluid equations. Emphasis on development of the fundamentals of finite difference methods and their application to viscous and inviscid flows.

MAE 462 Flight Vehicle Stability and Control. *Preqs: MAE 261, 435. 3(3-0) F.* Longitudinal, directional and lateral static stability and control of aerospace vehicles. Linearized dynamic analysis of the motion of a six degree-of-freedom flight vehicle in response to control inputs and disturbance through use of the transfer function concept. Control of static and dynamic behavior by vehicle design (stability derivatives) and/or flight control systems.

MAE 465 Propulsion II. *Preq: MAE 365. 3(3-0) F.* Performance analysis and design of components and complete air-breathing propulsion systems.

MAE 466 Propulsion II Laboratory. *Preqs: MAE 365, MAE 357; Coreq: MAE 465. 1(0-3) F.* Laboratory work in the material covered in MAE 365 and MAE 465.

MAE 472 Aerospace Vehicle Structures II. *Preq: MAE 371. 3(3-0) S.* A continuation of MAE 371; deflection of structures, indeterminate structures, minimum weight design, fatigue analysis and use of matrix methods in structural analysis. Selection of materials for aircraft construction based on mechanical, physical, and chemical properties.

MAE 473 Aerospace Vehicle Structures II—Laboratory. *Preq: MAE 371; Coreq: MAE 472. 1(0-3) S.* Demonstration and application of the theory and concepts presented in MAE 371 and MAE 472; i.e., use of resistance strain gages, load-deflection test of typical flight vehicle structural components, and correlation of test and analytical results.

MAE 478 Aerospace Vehicle Design I. *Available only to seniors in the Aerospace Engineering Curriculum. Preqs: MAE 356, 472, senior standing in AE; Coreqs: MAE 462, 465. 2(1-3) F.* A synthesis of previously acquired theoretical and empirical knowledge and application to the design of practical aerospace vehicle systems.

MAE 479 Aerospace Vehicle Design II. *Preq: MAE 478. 3(1-6) S.* A continuation of MAE 478. Alternate designs analyzed to determine a near-optimal one which best satisfies the mission requirements. Detail design performed on major components of the vehicle system.

MAE 495 Special Topics in Mechanical and Aerospace Engineering. *Preq: Consent of instructor. 1-3 F,S,Sum.* Offered as needed to present new or special MAE subject matter.

Selected 500-Level Courses Open To Advanced Undergraduates

MAE 501 Advanced Engineering Thermodynamics. *Preqs: MAE 302; MA 401 or MA 511. 3(3-0) F.*

MAE 502 Advanced Energy Systems. *Preq: MAE 412. 3(3-0) S.*

MAE 503 Advanced Power Plants. *Preq: MAE 412. 3(3-0) F.*

MAE 504 Fluid Dynamics of Combustion I. *Preqs: MAE 301, MAE 355 or MAE 308. 3(3-0) F.*

MAE 505 Heat Transfer Theory and Applications. *Preq: MAE 410 or equivalent. 3(3-0) F.*

MAE 506 Advanced Automotive Energy Systems. *Preq: MAE 408. 3(3-0) S.*

MAE 510 Effects of Noise and Vibration on Man. *Preqs: Sr. standing in Engineering, MA 301. 3(3-0) Alt. F.*

MAE 513 Vibration of Mechanical and Structural Components. *Preq: MAE 315 or 472. 3(3-0) F.*

MAE 514 Industrial Noise Control. *Preq: MAE 315. 3(2-3) S.*

MAE 517 Instrumentation in Sound and Vibration Engineering. *Preq: ECE 331; Coreq: MAE 513. 3(3-0) S.*

MAE 518 Acoustic Radiation I. *Preqs: MA 301 and MAE 308 or MAE 356. 3(3-0) F.*

MAE (IE) 520 Industrial Robotics. *Preqs: IE 351 or 485; MA 301 or 303. 3(3-0) F.*

MAE 525 Advanced Flight Vehicle Stability and Control. *Preq: MAE 462. 3(3-0) F.*

MAE 526 Inertial Navigation Analysis and Design. *Preq: MAE 435 or 462. 3(3-0) S.*

MAE (MAT) 531 Materials Processing by Deformation. *Preq: Six hours of solid mechanics and/or materials. 3(3-0) F.*

MAE (MAT) 532 Fundamentals of Metal Machining Theory. *Preq: Six hours of solid mechanics and/or materials. 3(3-0) S.*

MAE 533 Finite Element Analysis of Mechanical and Aeronautical Systems I. *Preq: MAE 472; Coreq: MAE 415. 3(3-0) S.*

MAE 534 Finite Element Analysis of Mechanical and Aeronautical Systems II. *Preq: MAE 533. 3(3-0) S.*

MAE 535 Experimental Stress Analysis. *Preq: MAE 316 or 371. 3(2-3) F.*

MAE 536 Photoelasticity. *Preq: MAE 316 or 371. 3(2-3) S. Alt. yrs.*

MAE 540 Advanced Air Conditioning Design. *Preqs: MAE 403, 404. 3(3-0) S.*

MAE 541 Advanced Machine Design I. *Preq: MAE 416. 3(3-0) F.*

MAE 550 Foundations of Fluid Dynamics. *Preqs: MAE 301, MAE 355 or MAE 308. 3(3-0) F.*

MAE 551 Airfoil Theory. *Preq: MAE 355. 3(3-0) S.*

MAE 552 Transonic Aerodynamics. *Preq: MAE 356. 3(3-0) S.*

MAE 553 Compressible Fluids. *Preq: MAE 356 or MAE 431 or MAE 550. 3(3-0) Alt. F.*

MAE 554 Hypersonic Aerodynamics. *Preq: MAE 356. 3(3-0) F.*

- MAE 555 Aerodynamic Heating.** *Preq: MAE 356. 3(3-0) F.*
- MAE 556 Mechanics of Ideal Fluids.** *Preq: MAE 355 or MAE 308. 3(3-0) S.*
- MAE 557 Dynamics of Internal Fluid Flow.** *Preq: MAE 356 or MAE 308. 3(3-0) F.*
- MAE 558 Plasmagasdynamics I.** *Preqs: MAE 356, PY 414. 3(3-0) F.*
- MAE (ECE) 565 Gas Lasers.** *Preqs: MAE 356 or equivalent, PY 407. 3(3-0) F.*
- MAE 570 Theory of Particulate Collection in Air Pollution Control.** *Preq: MAE 409 or grad. standing. 3(3-0) S.*
- MAE 586 Project Work in Mechanical Engineering.** *1-6 F,S.*
- MAE 589 Special Topics in Mechanical Engineering.** *Preq: Advanced undergrad. or grad. standing. 3(3-0) F,S.*

MATERIALS SCIENCE AND ENGINEERING

MAT 200 Mechanical Properties of Structural Materials. *Preqs: CH 105 and the first course in engineering mechanics. 2(1-3) F,S.* Dependence of mechanical properties such as stress-strain behavior, fatigue and creep on macro-, micro- and crystalline structures; control of structure through treatment.

MAT 201 Structure and Properties of Engineering Materials. *Preq: CH 105. 3(3-0) F,S.* Introduction to the fundamental physical principles governing the structure and constitution of metallic and nonmetallic materials and the relationships among these principles and the mechanical, physical and chemical properties of engineering materials.

MAT 210 Experiments in Materials Engineering. *Coreq: MAT 201. 1(0-3) S.* Experiments designed to familiarize students with techniques of materials examination and demonstrate basic principles of materials behavior.

MAT 301 Equilibrium and Rate Processes. *Coreqs: MA 201; MAT 201. 3(2-2) S.* Application of thermodynamic and kinetic principles to engineering materials in the liquid and solid states.

MAT 311 Ceramic Processing I. *Preq: MAT 201. 3(3-0) S.* Science and technology of ceramic raw materials; formulations; particle size reduction, separation and characterization; particle packing, mixing, blending and agglomeration; surface properties; rheology of liquid-solid and solid-polymer systems; and forming processes. Process requirements for different ceramic raw materials and formulations.

MAT 312 Ceramic Processing II. *Preq: MAT 311. 3(2-3) F.* Science and technology of thermal processing of ceramics with emphasis on obtaining controlled microstructures and resultant useful engineering properties. Topics include fuels, combustion and heat sources; heat transfer and utilization; gas and liquid flow relationships; psychometry and drying; calcining; firing, sintering in the solid state and in presence of liquid phases; melting and hot forming; and post-firing finishing operations.

MAT 321 Phase Transformations and Diffusion. *Preq: MAT 330. 3(3-0) S.* Types, mechanisms, and kinetics of solid state phase transformations are presented with selected applications of solid state transformations and correlations of phases with properties of materials. Mechanism of diffusion and techniques for diffusion calculations.

MAT 324 Polymer Characterization Laboratory. *Coreq: MAT 325. 1(0-3) F.* Polymer synthesis, molecular weight measurement, microscopic examination of polymers, measurement of thermal and mechanical properties, swelling, and permeability. **BALIK**

MAT (CHE) 325 Introduction to Polymeric Materials. *Preqs: CH 107, MAT 301; Coreq: MAT 324. 4(4-0) F.* Fundamental concepts in polymer science and engineering including: polymer chemistry, synthesis, physical structure, morphology, structure-property relationships, mechanical and thermal behavior, processing, and applications. **BALIK**

MAT 330 Principles of Materials I. *Preq: MAT 301. 3(3-0) F.* Structure of engineering materials from electronic to atomic and crystallographic considerations. Structural imperfections and their effects on properties. Applications of thermodynamic principles to the construction and use of phase diagrams in materials systems. Development of and correlation of microstructure with phase diagrams. PORTER

MAT 331 Principles of Materials II. *Preq: MAT 330. 3(3-0) S.* Electrical and magnetic properties of those structures studied in Principles of Materials I including dielectric, piezoelectric, ferromagnetic, and ferrimagnetic (ferrites) behavior; interactions of electromagnetic radiation with engineering materials; thermal properties, optical properties, luminescence. PORTER

MAT 332 Principles of Materials III. *Preqs: MAT 321 and 331. 3(3-0) F.* Practical methods for making quantitative estimates of changes in materials properties due to changes in composition, structure, and local environment. Metallic, ceramic, polymeric and electronic bulk materials and materials surfaces are treated. The use of computer modeling. BEELER

MAT 400 Metallic Materials in Engineering Design. *Preq: MAT 200 or 201. Not acceptable for MTE students. 3(3-0) F,S.* Relationship of microstructure to the properties of materials. Control of microstructure to meet engineering design requirements. MOAZED

MAT (NE) 409 Nuclear Materials. *Preq: MAT 201. 2(2-0) S.* Materials used in nuclear reactors-pertinent factors in selection and utilization of the materials, and the effects of radiation on their physical, chemical and mechanical properties. MURTY

MAT 410 Computer Applications for Materials Engineering. *Preqs: CSC 111; Coreq: MAT 330. 3(3-0) F.* Computer techniques for processing materials data and performing materials design and analysis calculations. BEELER

MAT 411 Physical Principles in Materials Science I. *Preq: MAT 321. 3(3-0) F.* The application of physical concepts to ceramic, metallic and polymeric materials. Interactions of electromagnetic radiation with crystalline and non-crystalline materials. Relation of properties to structure. BEELER

MAT 417 Ceramic Engineering Design. *Preq: MAT 311; Coreq: MAT 312. 3(3-0) S.* Individual and team study involving the interdependence of plant layout, processes, equipment and materials in the economic design of ceramic engineering systems and subsystems. Discussion of design principles, sources of data, creativity, and economic analysis to encourage original solutions to problems of current and future need and interest in the ceramic profession. GAY

MAT 423 Materials Factors in Design. *Preq: MAT 450. 3(2-3) S.* Nature and design-related properties of engineering materials including metals, ceramics, polymers and composites. Methodology of the materials selection processes including economic aspects. Case studies in particular applications.

MAT 430 Physical Metallurgy Laboratory. *Coreq: MAT 431. 1(0-3) F.* Laboratory experiments dealing with the mechanical properties and structure of ferrous and non-ferrous metals.

MAT 431 Physical Metallurgy I. *Preq: MAT 321, 450; Coreq: MAT 430. 4(4-0) F.* Application and design of selected ferrous and non-ferrous alloys in a theoretical and a practical context. Factors which improve resistance to fatigue failure, creep failure, corrosion, oxidation and brittle fracture. Iron-, aluminum-, copper-, nickel- and titanium-base alloys.

MAT 432 Physical Metallurgy II. *Preq: MAT 431. 3(3-0) S.* Application and design of alloys for a particular use in a theoretical and a practical context. Alloy systems considered: cast irons, stainless steels and tool steels, cobalt- and magnesium-base alloys, refractory metals, heavy metals and precious metals. Surface treatments, electrometallurgy, oxidation and corrosion.

MAT 434 Ceramic Engineering Laboratory. *Coreq: MAT 435. 1(0-3) S.* Processing of ceramic materials. Two compositions will be processed from raw materials to finished products. Evaluations made after each processing step. Effects of composition, equipment design, and processing conditions on properties in the fired ware.

MAT 435 Physical Ceramics I. *Coreqs: MAT 321, MAT 434. 3(3-0) S.* Physical and chemical nature of classical and newly discovered ceramic materials. Thermodynamics, crystal structure, structural imperfections, phase transformations and microstructure and their collective effects on thermal, elastic and strength properties.

MAT 436 Physical Ceramics II. *Preq: MAT 435. 3(3-0) S.* A continuation of MAT 435 with emphasis on the integrated effects of crystalline structure, structural imperfections and microstructure on plastic deformation and creep and on the optical, dielectric, electronic and magnetic properties of ceramic materials.

MAT 440 Foundry Metallurgy. *Preq: MAT 330. 3(3-0) S.* Physio-chemical considerations of the liquid state, the solidification process, and the solid state as they apply to the casting of metals and alloys.

MAT 441 Welding Metallurgy. *Preq: MAT 330. 3(2-3) F.* The interaction of material properties, welding processes and design.

MAT 450 Mechanical Properties of Materials. *Preqs: MAT 325 and 330; MAE 314. 3(3-0) S.* Elastic, plastic, and fracture or failure phenomena in solids treated in terms of fundamental deformation mechanisms and the role of microstructure. Tensile, creep, fatigue and viscoelastic modes of deformation and design considerations.

MAT 460 Microelectronic Materials. *Preqs: MAT 332, ECE 441. 3(3-0) S.* Processes and problems relevant to microelectronic materials technology. Boule growth, wafer preparation, epitaxial growth, doping techniques and device applications of elemental, binary and ternary compound semiconductors. Electrical, optical and chemical characterization of semiconductors and materials considerations relevant to device fabrication, bonding and packaging.

MAT 490 Special Topics in Materials Engineering. *Preq: Permission of Instructor. 1-4.* Offered as needed for the development of new courses in materials engineering, including areas such as metals, ceramics, polymers, or microelectronic materials.

MAT 491 Materials Engineering Seminar. *Preq: Sr. standing. 1(1-0) F,S.* Survey of selected topics and professional aspects of materials science and engineering. Written and oral reports by students and presentations by faculty and guest lecturers.

MAT 495 Materials Engineering Projects. *Preq: Jr. or sr. standing. 1-6 F,S.* Application of engineering principles to a specific materials engineering project by a student or small group of students under supervision of a faculty member. A written report required.

Selected 500-Level Courses Open To Advanced Undergraduates

MAT 503 Ceramic Microscopy. *Preq: MEA 331. 3(2-3) F.*

MAT 509 High Vacuum Technology. *Preq: CH 433 or MAE 301. 3(2-3) F,S.*

MAT 510 Structure of Crystalline Materials. *Preq: MAT 411; Coreq: MAT 500. 3(3-0) F.*

MAT (NE) 525 Nuclear Materials. *Preqs: NE 409 or MAT 201, CI. 3(3-0) F.*

MAT 527 Refractories in Service. *Preq: MAT 411. 3(3-0) S.*

MAT 529 Properties of High Temperature Materials. *Preqs: MAT 201 and MAE 301. 3(3-0) S.*

MAT (MAE) 531 Materials Processing by Deformation. *Preq: Six hours of solid mechanics and/or materials. 3(3-0) F.*

MAT (MAE) 532 Fundamentals of Metal Machining Theory. *Preq: Six hours of solid mechanics and/or materials. 3(3-0) S.*

MAT 533, 534 Advanced Ceramic Engineering Design I, II. *Preq: MAT 417. 3(2-3) F,S.*

MAT 540 Glass Technology. *Preq: MAT 435. 3(3-0) F.*

MAT 541, 542 Principles of Corrosion I, II. *Preqs: MAT 201 and CH 431 or MAE 301. 3(2-3) F,S.*

MAT 550 Dislocation Theory. *Preq: MAT 450. 3(3-0) F.*

MAT 556 Composite Materials. *Preq: MAT 450. 3(3-0) F.*

MAT (NE) 562 Materials Problems in Nuclear Engineering. *Preq: Advanced undergrad. standing. 3(3-0) F.*

MAT (NE) 573 Computer Experiments in Materials and Nuclear Engineering. *Preq: Advanced undergrad. standing. 3(3-0) S.*

MAT 595 Advanced Materials Experiments. *Preq: Sr. or grad. standing. 1-3.*

MICROBIOLOGY

MB 401 General Microbiology. *Preqs: BS 100, CH 223 or 220. 4(3-3) F,S.* Rigorous introduction to basic principles and concepts of microbiology. Designed for students in biological and agricultural sciences curricula and for all students planning to take further courses in microbiology.

MB (FS) 405 Food Microbiology. *Preq: MB 401. 3(2-3) F.* (See Food Science.)

MB 411 Medical Microbiology. *Preq: MB 401. 4(3-3) S.* A comprehensive study of the processes by which pathogenic microorganisms cause disease and the biological defense mechanisms by which the host resists. Methods of diagnosis, prevention and therapy of common diseases of microbial origin will be considered. The laboratory will introduce the student to the general techniques of clinical bacteriology, immunology and virology.

LUGINBUHL

MB 490 Special Topics in Microbiology. *Preqs: Three courses in microbiology and CI. 1-3 F,S,Sum.* Undergraduate students will be given an opportunity to participate in the research program of a faculty member or to participate in a special study of an advanced undergraduate topic.

MB 491 Seminar in Microbiology. *Preq: Junior standing; Coreq: MB 401. 1(1-0) F.* Designed to provide supervised small-group seminar discussions of current topics of interest in all areas of microbiology. Topics vary each semester; consult department for details.

Selected 500-Level Courses Open To Advanced Undergraduates

MB 501A,B,C Advanced Microbiology I. (A-Metabolism; B-Physiology; C-Immunology). *Preq: MB 401. 1-3 F.*

MB 502A,B,C Advanced Microbiology II. (A-Systematics; B-Virology; C-Pathogenesis). *Preq: MB 401. 1-3 S.*

MB 503 Microbial Ecology. *Preq: MB 401. 3(2-3) F.*

MB (FS) 506 Advanced Food Microbiology. *Preq: FS (MB) 405 or equivalent. 3(1-6) S.*

MB 511 Industrial Microbiology. *Preqs: BCH 451 and MB 401. 1(1-0) S.*

MB 514 Microbial Metabolic Regulation. *Preqs: MB 401, BCH 451 or BCH 551. 3(3-0) S.*

MB (SSC) 532 Soil Microbiology. *Preqs. MB 401; CH 220 or CI. 4(3-3) S.*

MB (ZO) 555 Protozoology. *Preq: CI. 4(2-6) S. Alt. odd.*

MB (BAE, CE) 570 Sanitary Microbiology. *Preq: MB 401 or equivalent. 3(2-3) S.*

MB (BO) 574 Phycology. *Preq: BS 100 or BO 200. 3(1-4) S.*

MB (BO, PP) 575 The Fungi. *Preq: BO 200 or equivalent. 3(3-0) F.*

MB (BO, PP) 576 The Fungi-Lab. *Coreq: BO 575. 1(0-3) F*

MARINE, EARTH AND ATMOSPHERIC SCIENCES

EARTH SCIENCE (GEOLOGY/GEOPHYSICS)

MEA 101 General Physical Geology. *Credit is not allowed for both MEA 101 and 120. Recommended that MEA 110 be taken concurrently. 3(3-0) F,S.* Systematic consideration of processes operating on and below the earth's surface and the resulting features of landscape, earth structures, and earth materials. Occurrences and utilization of the earth's physical resources.

MEA 110 Physical Geology Laboratory. *Coreq: MEA 101 or MEA 120. 1(0-2) F,S.* The common rock forming minerals, the common rocks, topographic maps, geological structures and geological maps. Field trips.

MEA 120 Elements of Physical Geology. *Credit is not allowed for both MEA 101 and 120. Recommended that MEA 110 be taken concurrently. 2(2-0) F,S.* Basic principles of physical geology. Major earth processes, principal geologic features, earth materials, and their interrelationships. Primarily intended for majors in disciplines requiring a minimum practical working knowledge of geology.

MEA 202 Historical Geology. *Preqs: MEA 101 or MEA 120. Recommended that MEA 110 be taken concurrently. 3(3-0) S.* The second semester of the basic introductory sequence in geology. Utilization of the principles of geology to reconstruct and understand the earth's past history. Geologic events that cause modification of the earth's crust, emphasizing North America. History of life and the environmental significance of changes in animal and plant life through geologic time. **SHOWERS**

MEA 208 Introduction to Environmental Geography. *3(3-0).* Man's physical environment; the interrelation between man and his physical environment. Topics include atmospheric, and oceanic structures and landforms. Interaction of land, sea, air and interaction of man and his environment. Use of geographic tools.

MEA 210 Historical Geology Laboratory. *Coreq: MEA 202. 1(0-2) S.* The reconstruction and interpretation of past events in the history of the earth. Interpretation of sedimentary rocks, construction and interpretation of geological maps, the identification of fossil organisms and the utilization of fossils in the reconstruction of earth history. **SHOWERS**

MEA 215 Geology and Landscape of the National Parks. *2(2-0) F.* The geologic evolution and landscape formation of the national parks of the United States. The underlying geologic character, the processes which have changed and shaped each area through time, and the evolution of the present landscape of each of the national parks, with emphasis on the geologic uniqueness and scenic beauty of the various localities.

MEA 300 Environmental Geology. *Preq: MEA 120 or MEA 101 or SSC 205. 3(3-0) S.* Geologic aspects of the environment; man's effect upon and interaction with the various geologic processes; geologic considerations involved in land use planning, waste disposal, and effective use of the earth's natural resources; geologic risks and hazards. **WELBY**

MEA 330 Crystallography and Mineralogy. *Preq: MEA 101 or 120; Coreqs: CH 101, MEA 110. 3(2-3) F.* The elements of morphological crystallography. Space lattices, crystal symmetry, systems and classes. Stereographic projection of common forms. Identification of minerals by crystallographic features, cleavage, fracture, luster, color, streak, hardness, specific gravity, etc. Chemical composition, varieties, occurrence, associations, important localities and uses. Crystal structures of selected minerals. **STODDARD**

MEA 330A Crystallography and Mineralogy. *Preq: MEA 101 or MEA 120; CH 101; MEA 110. Credit for both MEA 330A and MEA 330 is not allowed. 2(2-0) F.* Elements of morphological crystallography. Space lattices, crystal symmetry, systems and classes. Stereographic projection of common forms. Chemical composition, varieties, occurrence, associations, important localities and uses. Crystal structures of selected minerals. Identical to MEA 330, except that there is no laboratory. STODDARD

MEA 331 Optical Mineralogy and X-Ray Diffraction. *Preq: MEA 330. 4(2-4) S.* Techniques and underlying optical theory for identifying minerals with the polarizing microscope. Determination of index of refraction and birefringence; isotropic, uniaxial or biaxial character, optical sign and orientation. Adjunct apparatus for statistical and petrographic studies. Generation of x-rays, techniques and underlying theory for identifying by x-ray diffraction. STODDARD

MEA 351 Structural Geology. *Preqs: MEA 101 or 120; MEA 110. 4(3-3) S.* Basic principles of rock mechanics; stress-strain analysis of deformed rocks. Nature and mechanisms of formation of joints, cleavage, faults, folds and other structural features of the earth's crust. Introduction to geotectonics. Required overnight field trips. REYMER

MEA 415 Geology of Metalliferous Deposits. *Preqs: MEA 440, MEA 452. 3(2-3) S.* The nature, geologic setting and geographic distribution of metallic mineral deposits. Emphasis is on those deposits yielding ferrous, base, and precious metals and on the various geologic processes that work to produce them. Laboratory work with ore suites from famous mining districts of the world. Field trips. BROWN

MEA 423 Invertebrate Paleontology and Biostratigraphy. *Preqs: MEA 201-210, or ZO 202. 4(3-3) F.* Study of invertebrate forms occurring commonly as fossils together with study of their application to problems of correlation of strata, paleoecology, and development of concepts of evolution. Lecture, laboratory, field trips. WELBY

MEA 440 Igneous and Metamorphic Petrology. *Preq: MEA 331. 4(3-3) F.* Rocks formed by the crystallization of magmas (igneous) at the surface and subsurface and by the solid-state recrystallization of existing rocks (metamorphic). Origins of these rocks and related geologic processes interpreted within the framework of plate tectonics, whole-rock and mineral chemistry, and phase equilibria. Identification, classification, microscopy, mineralogy. FODOR

MEA 440A Igneous and Metamorphic Petrology. *Preq: MEA 330A. Credit for both MEA 440A and MEA 440 is not allowed. 3(3-0) F.* Rocks formed by the crystallization of magmas (igneous) at the surface and subsurface and by the solid-state recrystallization of existing rocks (metamorphic). Origins of these rocks and related geologic processes interpreted within the framework of plate tectonics, whole-rock and mineral chemistry, and phase equilibria. Identical to MEA 440, except that there is no laboratory. FODOR

MEA 452 Introductory Sedimentary Petrology/Stratigraphy. *Coreq: MEA 331. 4(3-3) S.* Identification, classification, geologic occurrence, and origin of minerals and rocks formed by physical, chemical and biological processes at and near the earth's surface. Principles of divisions of stratified terrains into natural units, correlation of strata, interpretation of depositional environments and facies. Required field trips. CAVAROC

MEA 461 Engineering Geology. *Preqs: MEA 101 or 120. 3(3-0).* Geologic and geotechnical engineering principles and techniques for engineering projects. Identification of important material properties and methods of determining these properties. Case studies presented. WELBY

MEA 465 Geologic Field Camp I. *Preqs: MEA 351, 440, 452. First part of six weeks out-of-state summer field camp. Both MEA 465 and MEA 466 must be taken in the same summer. 3 cr. Sum.* Geological field instruments and techniques. Geological field mapping of various geologic structures and terrains within areas of little deformed sedimentary strata. Additional fees required.

MEA 466 Geologic Field Camp II. *Preq: MEA 465. Second part of six weeks out-of-state summer field camp. Both MEA 465 and MEA 466 must be taken in the same summer. 3 cr. Sum.* Advanced geologic field techniques. Geologic field mapping in areas of complexly deformed volcanic and metamorphic rocks. Regional field trip away from field camp. Additional fees required.

MEA 470 Introduction to Geophysics. *Preqs: PY 208 or 212; an introductory course in geology. 3(3-0) F.* Structure of the earth, a dynamic and evolving entity, as inferred from seismology, gravity, magnetism and heat flow. Geodynamic processes responsible for continental drift; plate tectonic theory; regional geophysics of selected areas. BEVIS

MEA 471 Exploration and Engineering Geophysics. *Preq: MEA 470 or PY 208. Credit may not be received for both MEA 471 and MEA 570. 3(3-0) F.* Geophysical methods as applied to exploring the earth's mineral and energy resources, and investigating subsurface geological structure and its physical properties. Principles, measurements, analyses, and interpretations of gravity, magnetic, electric, electromagnetic, seismic methods. WON

MEA 475 Geophysical Field Methods. *Preq: MEA 471. Credit is not allowed for both MEA 475 and MEA 575. 2 cr. Sum. field camp. Alt. sum.* Practical geophysical field measurements using instruments for gravity, magnetic, electric, electromagnetic and radioactivity methods. Data interpretation in terms of subsurface geological structures and their physical properties, locations, sizes and shapes. Students must register for the course in the second summer session. Location: North Carolina. Estimated expense: \$150.00. BEVIS, WON

MEA 476 Seismic Exploration for Oil. *Preq: PY 208, knowledge of FORTRAN. Credit is not allowed for both MEA 476 and MEA 576. 3(3-0) S.* A comprehensive introduction to the reflection seismic method as applied to exploring oil and gas resources. Seismic instrumentation, field data acquisition, common-depth-point method, deconvolution, digital filtering, migration, and seismic stratigraphy of hydro-carbon depositional environments, along with computer-oriented exercises. WON

MEA 481 Principles of Geomorphology. *Preq: MEA 202 or equivalent. 3(2-2).* Landforms, the processes responsible for their origin, their stages of development and the underlying geology and structures on which they have formed. Emphasis on the geologic principles involved in interpreting the origin and evolution of the North American landscape.

MEA 491 Seminar on Selected Geologic Topics. 1-3. Study and discussion of selected geological topics.

Selected 500-Level Courses Open To Advanced Undergraduates

MEA 500 Regional Geology of North America. *Preqs: MEA 101 or 120, sr. standing. 1-6.*

MEA 510 Geological Oceanography. *Preq: MEA 452 or equivalent. 3(3-0) F.*

MEA 515 Topics in Southern Appalachian Geology. *Preqs: MEA 351 and MEA 440 or equivalent. 3(3-0) Alt. F.*

MEA 522 Petroleum Geology. *Preq: MEA 452. 3(3-0).*

MEA 523 Introduction to Subsurface Well Evaluation. *Preqs: CH 103, PY 212, MEA 120. 3(2-3) Alt. F.*

MEA 532 Ore Microscopy. *Preq: MEA 331. 3(0-6) Alt. F.*

MEA 542 Intermediate Petrographic Analysis. *Preq: MEA 440 or equivalent. 2(0-5).*

MEA 545 Advanced Igneous Petrology. *Preq: MEA 440. 3(2-2) Alt. S.*

MEA 546 Advanced Metamorphic Petrology. *Preq: MEA 440. 3(2-2) Alt. S.*

MEA 551 Advanced Structural Geology. *Preq: MEA 351. 3(2-3) Alt. F.*

MEA 562 Applied Sedimentary Analysis. *Preqs: MEA 452, ST 361. 3(2-2) Alt. F.*

- MEA 564 Depositional Environments and Lithostratigraphy.** *Preq: MEA 452 or grad. standing. 3(2-3) S.*
- MEA 565 Hydrogeology.** *Preq: MEA 452. 3(3-0) Alt. S.*
- MEA 567 Geochemistry.** *Preq: CH 331 or 433. 3(3-0) Alt. F.*
- MEA 570 Exploration and Engineering Geophysics.** *Preq: MEA 470 or PY 208. 3(3-0) S.*
- MEA 576 Seismic Exploration for Oil.** *Preqs: PY 208 and knowledge of FORTRAN language. 3(3-0).*
- MEA 577 Sedimentary Geochemistry.** *Preqs: CH 331 or CH 431 or MEA 567 or equivalent background. 3(3-0).*
- MEA 580 Remote Sensing.** *Preq: FOR 353 or CE 507 or MEA 481 or equivalent background. 3(2-1) F.*
- MEA 581 Advanced Geomorphology.** *Preq: MEA 481 or other equivalent background. 3(2-3).*
- MEA 582 Quaternary Geology.** *Preqs: MEA 101 or 120, sr. standing. 3(3-0).*
- MEA 583 Photogeology.** *Preq: MEA 101 or 120. 3(2-2).*
- MEA 588 Regional Tectonics.** *Preqs: MEA 351, 440, 452. 3(3-0) Alt. S.*
- MEA 593 Special Topics.** *Preq: CI. 1-6 F,S.*
- MEA 598 Advanced Topics in Geophysics.** *Preq: CI. 1-6 F,S,Sum.*

MARINE SCIENCE

MEA 200 Introduction to Oceanography. *Preq: High school physics, chemistry, algebra, trigonometry and biology or equivalent. 3(3-0) F,S.* The ocean as a part of our environment including interactions between atmosphere and ocean, ocean circulation, physical and chemical properties of sea water, marine geology and marine biology.

MEA (ZO) 220 Marine Biology. *Preq: MEA 200 or BS 100. 3(3-0) S.* An introduction to marine plants and animals, their adaptations to life in the sea and ecological interactions in selected marine environments (e.g. coral reefs, deep sea, salt marshes). Interactions of man with the sea: food from the seas, biology of diving. Weekend field trip required.

WOLCOTT

Selected 500-Level Courses Open To Advanced Undergraduates

- MEA 501 Environmental Fluid Mechanics.** *Preqs: MA 202, PY 208 3(3-1) F.*
- MEA 510 Geological Oceanography.** *Preq: MEA 452 or equivalent. 3(3-0) F.*
- MEA (ZO) 520 Principles of Biological Oceanography.** *Preqs: BS 100 and either BO (ZO) 360 or grad. standing. 3(3-0) S.*
- MEA 526 Air-Sea Interaction.** *Preq: MY 422 or MEA 560 or CI. 3(3-0) Alt. S.*
- MEA (CE) 541 Gravity Wave Theory I.** *Preq: MAE 308 or PY 411. 3(3-0) S.*
- MEA 560 Principles of Physical Oceanography.** *Preqs: MA 212 and PY 212 or equivalent. 3(3-0) S.*
- MEA 561 Introduction to Physical Oceanography.** *Preqs: MA 301, PY 208 or CI. 3(3-0) F.*
- MEA 568 Ocean Circulation.** *Preq: MAE 308 or PY 411. 3(3-0) F.*
- MEA 569 The Physical Dynamics of Estuaries.** *Preqs: MA 202 or 212; PY 208 or 212 or CI. 3(3-0) Alt. S.*
- MEA 571 Principles of Chemical Oceanography.** *Preq: CH 107 or equivalent. 3(3-0) F.*
- MEA 591, 592 Marine Sciences Seminar.** *1(1-0) S.*
- MEA 593 Special Topics.** *Preq: CI. 1-3 F,S.*

ATMOSPHERIC SCIENCE (METEOROLOGY)

MEA 201 Introduction to Weather and Climate. *For non-majors only. 3(3-0) F,S.* Explores the structure, physical causes, and climatology of weather systems including the jet streams, mid-latitude cyclones, hurricanes, thunderstorms, and tornadoes. Clouds and precipitation, air pollution, climate modification, optical effects (rainbows, halos) and weather instruments. Weather systems and forecasting techniques are illustrated through daily weather map discussions.

MEA 205 Introduction to Weather and Climate Laboratory. *Coreq: MEA 201. 1(0-2) F,S.* Supplements material in MEA 201. Meteorological instruments; weather observations; analysis, graphical display and interpretation of data; structure of weather systems; principles of weather forecasting.

MEA 311 Physical Climatology. *Preqs: PY 205, 211 or 221; Coreq: MA 201 or 212. 3(3-0) F.* Physical basis for weather and climates on earth, approached from the principles of physical climatology. Solar energy incident to, and modified by, the atmosphere; terrestrial radiation; transports of heat and water substance; heat balances and imbalances. Consequences to distributions of temperature, mass, motions, and weather.

DAVIS, RIORDAN

MEA 312 Physical Meteorology. *Preqs: PY 205 or 211 or 221; Coreq: MA 201, PY 208 or PY 212. 3(3-0) S.* Principles and concepts for understanding the atmosphere and various meteorological phenomena taking place in it such as dew, frost, fog, clouds, precipitation and vertical motions, thunderstorms, tornadoes, and hurricanes. These phenomena are explained using the basic principles of thermodynamics, statics, and buoyancy.

SAXENA

MEA 313 Meteorology Laboratory I. *Preq: MA 102 or 112; Coreq: PY 205 or 211 or 221. 1(0-3) F.* Supplements material in MEA 311: Surface data and analysis techniques, instrumentation, global energy budgets and transports, climatological distribution of weather variables, the structure and evolution of the mid-latitude cyclone.

RIORDAN

MEA 314 Meteorological Laboratory II. *Preq: MA 102 or 112; Coreq: PY 205 or 211 or 221. 1(0-3) S.* Supplements material in MEA 312: Meteorological fields, variation of temperature with height, measurement and calculation of water-vapor, cloud processes, thermodynamics applied to stability and thunderstorms.

WATSON

MEA 350 Principles of Applied Climatology. *Preq: PY 211. Meteorology majors may use only as a free elective. 3(3-0).* Basic climatic elements: radiation, temperature, atmospheric moisture, evaporation and wind. Atmospheric circulation. Spatial and temporal patterns of climatic elements and their classification. Regional climates. Climatic change. Application of climatic information and techniques to problems in engineering and the physical and biological sciences. Climate in relation to people and architecture. Climatic impact on energy usage, transportation, commerce, and business.

DAVIS

MEA (PM, FOR) 386 Agricultural and Forest Meteorology. *Preq: PY 211. 3(3-0) Alt. F.* Basic elements of meteorology: water and energy budgets; instrumentation. Applications selected from weather and crop yield, plant disease, insect migration, drought, frost damage protection, fire weather, remote sensing, irrigation scheduling, climatic classification, plant micrometeorology, meteorological decision-making.

DAVIS

MEA 405 Climatological Data Analysis. *Preq: MEA 311 and ST 361. 3(3-0) S.* Probability and statistics applied to climatology and meteorology. Discrete and continuous probability distributions of meteorological variables examined. Regression analysis applied to weather forecasting. Forecast verification. Smoothing and filtering processes. Introduction to time series analysis. Elementary decision theory.

DAVIS

MEA 412 Atmospheric Physics. *Preqs: MA 202, PY 208 or equivalent. 3(3-0) S.* Physical explanation of atmospheric aerosol, cloud and precipitation processes. Planned and inadvertent weather modification, hail suppression, hurricane modification; impact of urban-industrial pollution on weather. Atmospheric electricity: Remote sensing techniques: radar, lidar and acoustic sounder. Atmospheric optics: visibility and optical phenomena; scattering. Terrestrial and atmospheric radiation. Important processes are quantitatively analyzed.

SAXENA

MEA 421 Air Processes and Motions I. *Preqs: MA 202, PY 208, MEA 311, 312, 313, 314, 4(3-2) F.* Atmospheric thermodynamics: composition of air; applications of elementary kinetic theory and principles of energy and mass conservation; phase change of water. Principles of atmospheric statics: altimetry, static stability. Meteorological applications of fluid kinematics: applications of vector analysis; relationships among streamlines, trajectories, and streak lines; Lagrangian and Eulerian perspectives; linear properties of atmospheric motion fields. SAXENA

MEA 422 Air Processes and Motions II. *Preqs: MEA 421, 4(3-2) S.* Atmospheric dynamics: review of Newton's laws of motion; application to fluids; forces in the atmosphere, the vector equation of motion on a rotating earth; component equations in spherical coordinates; scale analysis and simplifications; vorticity; pressure coordinates; geostrophic, gradient, cyclostrophic, and inertial winds; vertical shear of the wind (thermal wind); the planetary boundary layer; introduction to dynamics of waves. WATSON

MEA 443 Weather Analysis and Forecasting I. *Preqs: MEA 421, 3(1-6) F.* Time and space distributions of cloud and weather systems. Sounding analysis with application to moisture distribution and aircraft icing; sounding modification processing. Vertical structure of fronts, tropopause, and jetstreams; clear air turbulence. Three-dimensional structure and evolution of pressure systems. Analysis of the wind field; calculation of kinematic properties. BUSINGER, WATSON

MEA 444 Weather Analysis and Forecasting II. *Preq: MEA 443, 3(1-6) S.* Introduction to statistical forecasting methods; applications to local forecast studies. Three dimensional structure of weather systems as revealed by isentropic analysis; applications to forecasting clouds and precipitation. Applications of quasi-geostrophic theory to understanding and forecasting cyclone motion and development; application to forecasting clouds and precipitation, severe weather analysis and forecasting. Numerical weather prediction. BUSINGER, WATSON

MEA 455 Micrometeorology. *Preq: MEA 422 or MAE 402, 3(3-0) F.* The energy balance at the earth's surface; soil heat flux and temperature profiles. Vertical distributions of wind, temperature and humidity in the atmospheric surface layer; exchanges of momentum, heat and moisture between the earth and the atmosphere; agricultural and forest micrometeorology. ARYA, RIORDAN

MEA 493 Special Topics in Meteorology. *Preq: Consent of department, 1-3 F, S.* Experiment, individualized study, or research in topics of student's interest which are not covered conveniently in the scheduled courses.

Selected 500-Level Courses Open To Advanced Undergraduates

MEA 512 Satellite Meteorology. *Preq: MA 202; Coreq: MEA 443, 3(3-0) Alt. S.*

MEA 521 The Upper Atmosphere. *Preq: MEA 311 or CI, 3(3-0) S, Sum.*

MEA 524 Dynamic Meteorology. *Preq: MEA 422 or equivalent, 3(3-0) F.*

MEA 526 Air-Sea Interaction. *Preq: MEA 422 or MEA 560 or CI, 3(3-0) Alt. S.*

MEA 527 Planetary Boundary Layer. *Preq: MEA 455 or MEA 526 or CI, 3(3-0) Alt. F, S.*

MEA 555 Meteorology of the Biosphere. *Preqs: PY 205 or 211; CH 103 or 107; MA 102 or 112, 3(3-0) F.*

MEA 556 Air Pollution Meteorology. *Preqs: MA 201 or 212, PY 208 or 212, CH 103 or 105 or 107 or equivalent, 3(3-0) F.*

MEA 557 Advanced Cloud and Precipitation Physics. *Preq.: MEA 421 or MEA 412, 3(3-0) Alt. F.*

MEA 558 Atmospheric Aerosols. *Preqs.: CH 103 or 107 and PY 205 or 211; Coreq.: MEA 412, 3(3-0) Alt. S.*

MEA 593 Special Topics. *Preq: CI, 1-6 F, S, Sum.*

MILITARY SCIENCE (ARMY ROTC)

(Also see AS—Aerospace Studies.)

MS 101 Introduction to ROTC and the Army. *Enrollment limited to freshman and sophomore students only. 1 (1-1) F,S.* The mission and organization of the U. S. Army and an introduction to ROTC. Advantages, opportunities and benefits of becoming an officer in the Army. Role of the U.S. Army in current events.

MS 103 Ranger/Special Forces Operations. *1(1-0) F,S.* An introduction to the Army Ranger and Special Forces Programs. Their histories, philosophies, and objectives, and various techniques and methods employed by each.

MS 104 Military Physical Training. *1(1-0) S.* An introduction to various military physical training programs, to include conditioning drills, grass drills, and team contests. An opportunity to measure the individual's physical condition against rigid Army standards is also offered.

MS 106 Map Reading. *Enrollment limited to freshman and sophomore students only. 1 (1-0) F,S.* An introduction to basic map reading techniques, to include how to determine present location through the use of intersection and resection procedures. The course will provide useful information for outdoor activities, ranging from competitive orienteering to occasional backpacking.

MS 107 Military Management and Problem Solving. *1(1-0) S,Sum.* Management techniques focusing on the integration of management theory and utilization. Emphasis on a structured empirical method rather than theory or case studies.

MS 201 Basic Military Leadership. *Preqs: MS 101 and 106. 2(2-1) F,S.* Basic instruction and practical work in the fields of leadership and management. Emphasis is on the elemental supervisor, subordinate relationships in a formal organization, drill and physical conditioning. A Saturday trip to the Ft. Bragg Recondo School is offered. Students will be issued uniforms and expected to comply with U.S. army appearance standards.

MS 202 Basic Small Unit Tactics. *Preqs: MS 101 and MS 106. 2(2-1) S.* Principles of small unit (squad level) tactics and their application. Emphasis on basic individual skills and knowledge required to lead squad size organizations. Student leadership laboratory sessions apply tactical principles.

MS 205 Fire Support Coordination. *1(1-0).* An introduction to the Army's fire support agencies. The course will provide the student with a basic understanding of the methods of target acquisition. In addition, the student will be exposed to the gunnery hardware used by a fire support agency.

MS 301 Military Leadership and Training Management. *Preq: Advanced course cadets. 3(2-3) F.* Organizational leadership and processes in the Army; leadership activities and key management functions. Management and conduct of group training activities.

MS 302 Intermediate Small Unit Tactics. *Preq: Advanced course cadets. 3(2-3) S.* Planning, organizing and executing military operations at the squad and platoon level. Focus on the leader's actions, map reading and navigation.

MS 401 Military Law and Advanced Tactics. *Preq: MS 305, MS 306. 3(3-1) F.* The role of military justice in the Army and its impact on a soldier's actions in the military, civilian, and international communities are examined. Doctrines and philosophies which dictate the employment of platoon and company size forces, and the role of discipline in developing an effective unit are studied.

MS 402 Military Ethics and Professional Development. *Preqs: MS 301, 302. 3(3-0) S.* Ethics and professionalism of the officer corps. Responsibilities of small unit leaders and techniques for managing people and material. The social aspect of military life.

MS 404 American Military History. *Preq: Advanced course cadets. 1(1-0).* An advanced-level military science course designed to give the student a basic appreciation of the historical development of the U.S. Army and its role in support of national objectives. Emphasis is placed on the central importance of leadership in determining the outcome of war and on the effect of technology upon military tactics.

MS 495 Special Topics in Military Science. *1(1-0) F,S.* A general course offered as needed to treat new or special subject matter in military science.

MUSIC

MUS 100 Instrumental Music. *Student may receive credit for only one section of MUS 100 per semester. Preq: Satisfactorily passing audition. 1(0-4) F,S.* The performance and study of the best in instrumental music. Assignments to various instrumental organizations made according to instrument played and individual interests and abilities.

MUS 101 Beginning Class Piano I. *1(0-1) F,S.* Introductory course for students with no previous piano experience. Music notation, chord formation, keyboard techniques, and ensemble playing. Reading and playing developed through folk, popular, and classical repertoire.

MUS 102 Beginning Class Piano II. *Preqs: Mus 101 or equivalent and consent of instructor. 1(0-1) F,S.* A continuation of MUS 101. Further development through the study of more advanced repertoire.

MUS 110 Choral Music. *Preq: Satisfactorily passing audition. 1(0-4) F,S.* The performance and study of the best in choral music. Assignments to various choral organizations made according to individual interests and abilities.

MUS 120 Rudiments of Music. *3(3-0) F,S.* Introductory course for students with no musical experience. Learn to read and notate music, as well as sing and play "community song" type melodies on the piano with simple chordal accompaniments. VOGEL

MUS 150 String Chamber Music. *May be repeated for credit once each semester. Preqs: Ability to play a stringed instrument (or piano) and consent of instructor. F,S.* Analysis, rehearsal, and class performance of string chamber music, with emphasis on the string quartet. Historical development of the string quartet will be the primary research topic.

MUS 200 Understanding Music. *3(3-0) F,S.* Understanding our musical heritage. Evaluation of music in terms of its content, form, stylistic period, and the elements of melody, harmony, rhythm, and tone color.

MUS 210 A Survey of Music in America. *3(3-0) S. Alt. yrs.* A historical survey of music in America with emphasis on the major influences which have contributed to the musical literature, investigation of forms and styles and of the roles they have played in the development of various musical traditions. HAMMOND

MUS 215 Music of the 17th and 18th Centuries. *3(3-0) Alt. yrs.* Traces and describes the evolution of European music from 1600 to 1800, with particular emphasis on characteristics of form and style as they apply to music of specific periods. Social, political, and cultural influences are highlighted, representative examples are discussed as well as major composers of each style and period. WARD

MUS 220 Music of 19th Century Europe. *3(3-0) S. Alt. yrs.* A survey of 19th century European music, including analysis of its texts, forms and composers, and its relations to other art forms of the period. BLISS

MUS 230 Introduction to Music Drama. *3(3-0) F, Alt. yrs.* Surveys of varieties of lyric stage works from opera to musical comedy. Historical references, performance practices and musical analysis are emphasized. Designed for the student who has little or no technical knowledge of music. WARD

MUS 240 Introduction to the Symphony Orchestra and Its Music. *3(3-0) F, Alt. yrs.* Examination of the development of the orchestra as a performing medium and of contemporary symphony orchestras. A survey of orchestra literature of specific forms and types from the 17th century to the present. **PETTERS**

MUS 250 Vocal Techniques. *1(0-2) F,S.* Instruction in proper vocal techniques and introduction to vocal solo literature. Emphasis on self-improvement through group methods. **BLISS**

MUS 301 Basic Music Theory I. *Preq: Ability to read music. 3(3-0) F,S.* Introductory course for students with no academic musical background. Basic elements of music taught historically through exercises in notation, ear training, written harmony, formal analysis. Application through a study of selected compositions from the musical literature and through the creation of an original composition written by each student. **VOGEL**

MUS 302 Basic Music Theory II. *Preqs: MUS 301, CI. 3(3-0) F,S.* Second course in music theory. Musical analysis of representative works. Further study of chordal functions and orchestration technics through written exercises. Compositions written by students. **VOGEL**

MUS 305 Introduction to Music Composition. *Preqs: MUS 301, MUS 302. 3(3-0) F,S.* Designed to provide students with experience in creating original musical compositions. Practice in writing phrases and periods, as well as practice in analysis. Assignments will include various musical forms with emphasis on 18th, 19th, but mostly 20th Century compositional techniques. Characteristics of instruments are explored. Scoring will employ a variety of instrumental and choral groupings. **VOGEL**

MUS 320 Music of the 20th Century. *3(3-0) F.* A study of representative music from 1900 to the present. Emphasis is upon the composers, their music, and composition techniques. Traditional, atonal, serial, aleatory, and electronic music are examined. **PETTERS**

MUS 495 Special Topics in Music. *1-3 F,S.* New or special subject matter not covered by existing music courses.

NUCLEAR ENGINEERING

NE 202 Applications of Nuclear Energy. *Preq: PY 208. 4(3-2) S, Sum.* An introduction to nuclear energy. Topics include radiation detection, interaction of radiation, radioactivity, nuclear reactions, fission, fusion, radiation safety, and nuclear reactors. The laboratory stresses measurement of nuclear radiation. **WEHRING**

NE 301 Fundamentals of Nuclear Engineering. *Preqs: MA 301 and a C or better in NE 202. 4(3-2) F.* Topics include neutron physics, reactor theory, and reactor operation. Emphasis on basic principles underlying the design and operation of nuclear systems, facilities and applications. Laboratory sessions include the various techniques of radiation detection and measurement, reactor nuclear instrumentation, and reactor measurements. **HANKINS**

NE 302 Nuclear Reactor Energy Conversion. *Preqs: MAE 301, CSC 111, and a C or better in NE 301. 4(3-2) S.* An introduction to the concepts and principles of heat generation and removal in reactor systems. Topics include power cycles, reactor heat sources, analytic and numerical solutions to conduction problems in reactor fuel elements and single phase convection heat transfer in rod bundles. A laboratory in the basics of heat transfer is included. **DOSTER**

NE 401 Reactor Analysis and Design. *Preq: C or better in NE 301; Coreq: MA 401. 4(3-2) S.* Elements of nuclear reactor theory and reactor operation, including neutron slowing down and diffusion, Fermi age theory, multigroup concepts, criticality of homogenous and heterogenous reactors, and reactor dynamics. Observation and measurement of reactor behavior and correlation with theory. **GILLIGAN**

NE 402 Reactor Engineering. *Preq: NE 302, MA 401. 4(3-2) F.* An introduction to the thermal-hydraulics and to the shielding analysis of nuclear power systems. Topics include single and two phase flow, boiling heat transfer, modeling of fluid systems; reactor radiation sources, radiation interactions, radiation attenuation, and shielding. Representative design calculations are performed.

GILLIGAN

NE 403 Nuclear Engineering Design Projects. *Preq: NE 401, NE 402. 3(2-3) S.* Student projects in design of practical nuclear engineering systems. Preliminary designs are developed by teams with advice by faculty as needed, and reports are presented in oral and written form. Current and future systems are emphasized, and use of computers is encouraged.

AUCIELLO

NE 404 Radiological, Reactor, and Environmental Safety. *Preq: NE 302 or 419. 3(3-0) F.* A basic course in health physics and the environmental aspects of nuclear power generation. Topics include: biological effects of radiation, dose-rate evaluation, radiation monitoring, and radiological safety; reactor effluents and radioactive waste disposal; regulations governing radiation exposure and the release of radioactivity into the environment; environmental impact of nuclear power plants.

MANI

NE 405 Reactor Systems. *Preq: NE 302. 3(3-0) F.* Nuclear power plant systems, their design criteria, design parameters, and economics. Topics covered include: PWR, BWR, HTGR, their primary loops, auxiliary and emergency systems; containment; radwaste handling; reactor control systems and reactor operation; quality assurance; cost components of nuclear power.

TURINSKY

NE (MAT) 409 Nuclear Materials. *Preq: MAT 201. 2(2-0) S.* Materials used in nuclear reactors-pertinent factors in selection and utilization of the materials, and the effects of radiation on their physical, chemical and mechanical properties.

AUCIELLO, MURTY

NE 412 Nuclear Fuel Cycles. *Preq: NE 401. 3(3-0) S.* Processing of nuclear fuel with description of mining, milling, conversion, enrichment, fabrication, irradiation, shipping, reprocessing, and waste disposal. Fuel cycle economics and fuel cost calculation. In-core and out-of-core nuclear fuel management, engineering concepts, and methodology.

TURINSKY, VERGHESE

NE 414 Nuclear Power Plant Instrumentation. *Preqs: NE students: ECE 331, 332; EE students: NE 419. 3(3-0) F.* Instrumentation required for control and safety of a nuclear power plant. The dynamic behavior of a nuclear plant developed so that the characteristics required of the instrumentation may be stated. Methods of combining the various measured parameters, (e.g. neutron flux, coolant flow, coolant pressure, temperature) to achieve safe operation. Protection against loss-of-power, lightning, and other common-mode failures.

SAXE

NE 419 Introduction to Nuclear Engineering. *Preq: PY 202 or 208. Not open to undergraduate majors in Nuclear Engineering. 3(3-0) F,S.* Nuclear energy applications, including nuclear reactor materials, reactor theory, shielding, thermal and hydraulic analysis, and control. Uses of nuclear fission and its by-products in research, industry and propulsion. Major engineering problems are defined and methods of approach outlined. Course designed for students not majoring in nuclear engineering.

NE 491 Special Topics in Nuclear Engineering. *Preq: CI. Variable credit. 1-4. Detailed coverage of special topics.*

Selected 500-Level Courses Open To Advanced Undergraduates

NE 508 Radiation Safety. *Preq: NE 401 or NE 520. 3(2-3) S.*

NE (PY) 511 Nuclear Physics for Engineers. *Preq.: PY410 3(3-0) F.*

NE 520 Radiation and Reactor Fundamentals. *Preqs: MA 401 and NE 401 or equivalent. 2(2-0) F.*

NE 521 Nuclear Laboratory Fundamentals. *Preqs: MA 401 and NE 401 or equivalent. 2(1-3) F.*

NE 522 Reactor Dynamics and Control. *Preq: NE 401 or NE 520. 3(3-0) F.*

- NE 523 Reactor Analysis.** *Preqs: NE 401 or NE 520. 3(3-0) F.*
- NE 524 Reactor Heat Transfer.** *Preq: NE 402 and NE 401 or NE 520, 3(3-0) S.*
- NE (MAT) 525 Nuclear Materials.** *Preqs: NE 409 or MAT 201, CI. 3(3-0) F.*
- NE 526 Radioisotopes Measurement Applications.** *Preq: NE 401 or 520. 3(3-0) S.*
- NE 527 Nuclear Engineering Analysis.** *Preqs: NE 401 or NE 520. 3(3-0) F.*
- NE 528 Principles of Fusion Reactors.** *Preq: NE 401 or NE 520. 3(3-0) S.*
- NE (MAT) 562 Materials Problems in Nuclear Engineering.** *Preq: Advanced undergrad. standing. 3(3-0) F.*
- NE (MAT) 573 Computer Experiments in Materials and Nuclear Engineering.** *Preq: Advanced undergrad. standing. 3(3-0) S.*
- NE 591, 592 Special Topics in Nuclear Engineering I, II.** *Preq: CI. 3(3-0) F,S.*

NAVAL SCIENCE

NS 100 Midshipman 4/C Naval Science Laboratory. *0(0-1) F,S.* Military drill, courtesies and honors, elements of unit leadership, physical fitness and professional development of the prospective Naval/Marine Corps Officer. Required of Midshipmen 4/C.

NS 110 An Introduction to Naval Science. *2(2-0) F.* Fundamental orientation to the Naval Service emphasizing the mission, organization, regulations, customs and traditions, broad warfare components of Navy and the major challenges facing today's Navy and Marine Officers.

NS 120 Naval Ships Engineering Systems. *3(3-0) S.* Introduction to the types, structure and purpose of naval ships. Survey of naval engineering systems with emphasis on marine propulsion and control systems, supporting auxiliary subsystems, ship design and stability and damage control procedures.

NS 200 Midshipman 3/C Naval Science Laboratory. *0(0-1) F,S.* Continuation of NS 100. Required of Midshipmen 3/C.

NS 210 Naval Seapower and Maritime Affairs. *2(2-0) S.* Contemporary studies in the general concept of seapower (including the merchant marine) the role of various warfare components of the Navy in supporting the Navy's mission, the implementation of seapower as an instrument of national policy, and a comparative study of U. S. and Soviet naval strategies.

NS 220 Naval Weapons Systems. *3(3-0) F.* Theory and principles of operation of naval weapons systems emphasizing types of weapons and fire control systems, capabilities and limitations, theory of target acquisition, identification and tracking, trajectory principles, and basics of naval ordnance.

NS 300 Midshipman 2/C Naval Science Laboratory. *Preq: Junior standing. 0(0-1) F,S.* Continuation of NS 200. Required of Midshipmen 2/C.

NS 310 Navigation. *4(3-2) F.* A comprehensive study of the theory, principles and procedures of ship navigation, movements and employment. Course includes mathematical analysis, spherical triangulations and practical work involving sight reduction, sextant, publications and report logs.

NS 320 Naval Operations. *Preq: Junior standing. 4(3-2) S.* Components of general naval operations, including concepts and application of tactical formations and dispositions, relative motion, maneuvering board and tactical plots, rules of the road and naval communications.

NS 330 Evolution of Warfare. *Preq: Junior Standing. 3(3-0) F.* A survey of the evolution of warfare through the study of selected campaigns and classic battles with special emphasis on the principles of war, the military impact of leadership, and the evolution of tactics, weapons, and weaponry.

NS 400 Midshipman 1/C Naval Science Laboratory. *Preq: Senior standing. 0(0-1) F,S.* Continuation of NS 300. Required of Midshipmen 1/C.

NS 410 Naval Leadership and Management I. *Preq: Junior standing. 1(1-0) F.* Organizational principles, management theory and leadership styles as they apply in the Navy and Department of Military Defense.

NS 420 Naval Leadership and Management II. *Preq: Senior standing. 1(1-0) S.* Skills and abilities needed for competence as a commissioned officer in the area of human resources management, naval personnel management, material management, and the administration of discipline.

NS 430 Amphibious Warfare. *Preq: Senior standing. 3(3-0) S. Alt yrs.* A survey of the projection of sea power ashore with special emphasis on the evolution of and innovation in amphibious warfare in the 20th Century through the study of historical amphibious landings and campaigns.

NUTRITION

NTR (ANS, FS) 301 Modern Nutrition. *Preq: Sophomore standing. Food science majors may use as a free elective only. 3(3-0) F,S.* Introduction to principles of nutrition; properties and functions of essential nutrients: carbohydrates, proteins, fats, vitamins, minerals, water. Food providing required nutrients; selection of adequate diet; nutrition through life cycle; nutritional deficiencies. Obesity, arterial and heart disease; weight control; vegetarian diets; "organically-grown" foods; megavitamin controversy; fad diets and food quackery; food additives; world food crisis. McCLELLAND

NTR (ANS, PO) 415 Comparative Nutrition. *Preq: CH 220 or both 221 and 223. 3(3-0) F.* (See Animal Science or Poultry Science.)

NTR (ANS) 419 Human Nutrition in Health and Disease. *Preqs: BCH 451, NTR 415 or FS 400. 3(3-0) F.* Current concepts and physiological bases of the roles of nutrition in the maintenance of health during the different stages in the life cycle and in the prevention and therapy of specific disease states in humans. JONES

NTR 490 Nutrition Seminar. *Preq: Sr. standing. 1(1-0) S.* Reviews, analyses and discussions of selected problems of current interest in the field of human nutrition and allied sciences. Each student will be required to make at least two oral presentations on subjects of their choosing. Classes will consist of student presentations and outside speakers.

Selected 500-Level Courses Open To Advanced Undergraduates

NTR (ANS) 516 Quantitative Nutrition *Preq: BCH 451 or NTR (ANS) 415 or NTR (ANS) 419 or FS 400. 3(1-6) S.*

NTR (ANS) 540 Ruminant Physiology and Metabolism. *Preqs.: BCH 451 or 551, ZO 421. 3(3-0) F. Even yrs.*

NTR 590 Topical Problems in Nutrition. *Preq: Grad. or sr. standing. 1-6 F,S.*

OPERATIONS RESEARCH

Selected 500-Level Courses Open To Advanced Undergraduates

OR 501 Introduction to Operations Research. *Preqs: MA 421 or ST 421 or ST 371 and ST 372. 3(3-0) F,S.*

OR (IE, MA) 505 Linear Programming. *Preq: MA 405. 3(3-0) F,S.*

OR 506 Algorithmic Methods in Nonlinear Programming. *Preqs: MA 301, MA 405, knowledge of computer language, such a FORTRAN or PL1. 3(3-0) S.*

OR (IE) 509 Dynamic Programming. *Preqs: MA 405, ST 421. 3(3-0) S.*

OR (CHE) 527 Optimization of Engineering Processes. *Preqs: CHE 451 or OR 501, FORTRAN programming. 3(3-0) F.*

OR (E, MA) 531 Dynamical Systems and Multivariable Control. *Preqs: MA 301, 405 or equivalent. 3(3-0) F.*

OR (IE) 561 Queues and Stochastic Service Systems. *Preq: MA 421. 3(3-0) F.*

OR (CSC, CSE, ECE, IE) 562 Computer Simulation Techniques. *Preq: ST 516 and a scientific programming language. 3(3-0) F.*

OR (CSC, MA) 585 Graph Theory. *Preq: MA 231 or 405. 3(3-0) F.*

OR 591 Special Topics in Operations Research. *Preq: CI. 1-3 F,S,Sum.*

PUBLIC ADMINISTRATION

(Also see also PS—Political Science.)

Selected 500-Level Courses Open To Advanced Undergraduates

PA 508 Urban Politics. *Preqs: Advanced undergrad. standing including 12 hours of political science, grad. standing or PBS status. 3(3-0) S.*

PA 509 Problems in Urban and Metropolitan Area Government. *Preqs: Advanced undergrad. standing including 12 hours of political science, grad. standing or PBS status. 3(3-0) S.*

PA 511 Public Administration. *Preqs: Advanced undergrad. standing including 12 hours of political science, grad. standing or PBS status. 3(3-0) F,S,Sum.*

PA 516 Public Policy Analysis. *Preq: Advanced undergrad. standing including 12 hours of political science, grad. standing or PBS status. 3(3-0) F,S,Sum.*

PA 518 Organization Design. *Preq.: Advanced undergrad. standing including 12 hours of political science, grad. standing or PBS status. 3(3-0) S.*

PA 519 Corrections Management. *Preq: Advanced undergrad. standing including 12 hours of political science, grad. standing or PBS status. 3(3-0) S.*

PA 520 Environmental Policy. *Preq: Advanced undergrad. standing including 12 hours of political science, grad. standing or PBS status. 3(3-0) F.*

PA (FOR) 522 Natural Resources Policy and Administration. *Preqs: Advanced undergrad. standing including 12 hours of political science, grad. standing or PBS status. 3(3-0) S.*

PA 564 Ethics and Public Policy. *Preqs: Advanced undergrad. standing including 12 hours of political science, grad. standing or PBS status. 3(3-0) F.*

PA 571 Research Methods and Analysis. *Preqs: Advanced undergrad. standing including 12 hours of political science, grad. standing or PBS status and an introductory course in statistics. 4(3-1) F,S.*

PA 574 Data Management in Public Administration. *Preqs: PS 374 or PA 573 and previous coursework or experience in public administration. 3(3-0) S.*

PA 598 Special Topics in Public Administration. *Preq: Advanced undergrad. standing including 12 hours in political science, grad. standing or PBS status. 1-6 F,S,Sum.*

PRODUCT DESIGN

(Also see DN—Design; VD—Visual Design.)

PD (TMT) 170 Textile Design Orientation. *1(0-2) S.* Orientation course designed to present the breadth and scope of the Textile Design profession together with future opportunities in this field.

PD 262 Professional Practice in Product Design. *3(3-0) F.* Issues and situations encountered in a product design practice. Topics include portfolio and resume preparation, patents, contracts, basic marketing skills within corporations and as a freelance designer.

PD (TMT) 272 Printed Textile Design. *Preq: A grade of C or better in DF 111 or DF 101. 3(0-6) S.* Design and production of printed and pattern-dyed fabrics. Development of design abilities through hand production methods with an awareness of industrial processes.

PD (TMT) 371 Woven Textile Design. *Preqs: PDT 105. 3(1-4) F.* Design and production of woven fabrics, including an exploration of various basic structures, color effects and textural effects. Development of design abilities through hand production methods with an awareness of industrial processes. DONALDSON

PD (TMT) 372 Knitted Textile Design. *Preq: T 105. 3(1-4) S.* Design and production of both hand and machine-knitted fabrics, jacquard patterning, and color effects. Development of design abilities through practical application of hand- and machine-production methods. Awareness of industrial processes. DONALDSON, WILCHINS

PD 400 Intermediate Product Design (Series). *Preq: DF 102. May not be taken more than six times. 6(0-9) F,S.* This series of courses is concerned with various social/economic age groups, various forms and rates of production, and various natural and synthetic materials. Students select from a number of vertically organized workshop studios which offer on an optional basis a wide range of program emphases.

PD (TMT) 470 Textile Design Studio. *Preqs: A grade of C or better in PD (TMT) 272, 371, and 372. 6(0-9) F.* Semester design project based on a single problem statement. Individual investigation of resources, processes and solutions in the development of a collection of fabrics or end products. Public exhibition of collections. WILCHINS

Selected 500-Level Courses Open To Advanced Undergraduates

PD 511 Product Design Materials & Processes I. *Preq: Grad standing; waiver of prerequisite is at the discretion of the instructor. 3(3-0) F.*

PD 512 Product Design Materials & Processes II. *Preq: Grad. standing; waiver of prerequisite is at the discretion of the instructor. 3(3-0) S.*

PHYSICAL EDUCATION

(For a final grade and one semester-hour credit to be received, the student must complete a full semester of either a full-semester course or two half-semester courses taken in the same semester. All activity courses taught in the summer meet for a full session and receive 1 hour credit.)

PE 100 Health and Physical Fitness. *(Full semester). 1(0-2) F,S,Sum.* A lecture laboratory course to assess and improve the individual's physical fitness, and to convey health/fitness knowledge.

PE 112 Beginning Swimming. *(Full semester). 1(0-2) F,S,Sum.* Teaches nonswimmers the basic swimming skills necessary to demonstrate survival swimming ability.

PE 113 Advanced Beginning Swimming. *(Full semester), Preq: PE 112 or equivalent skills. 1(0-2) F,S.* A continuation of Beginning Swimming which builds on the skills and stroke development learned in PE 112.

PE 116 Soccer. *(Full semester). 1(0-2) F,S,Sum.* Soccer with emphasis on skills development, playing strategies, and rules of the game.

PE 117M Gymnastics (Men). *(Full semester). 1(0-2) F,S.* Fundamentals of gymnastics for men. Floor exercise, vaulting, parallel bars, side horse, high bar, rings, and spotting.

PE 117W Gymnastics (Women). *(Full semester). 1(0-2) F,S.* Fundamentals of gymnastics for women. Floor exercise, balance beam, uneven bars, vaulting and spotting techniques.

PE 118 Restricted Activity I. (*Full semester*). *Preq: Documentation of medical restriction. 1(0-2) F,S.* For students who have physical and medical problems and cannot take the regular physical education classes. A course of study is designed in which individual needs and limitations are accommodated.

PE 119 Restricted Activity II. (*Full semester*). *Preq: Documentation of medical restriction. 1(0-2) F,S.* Follows PE 118 for students who require adapted physical activities due to medical and physical limitations.

PE 221 Intermediate Swimming. (*Full semester*). *Preq: PE 113 or equivalent skill. 1(0-2) F,S,Sum.* Develops skills in five swim strokes: American crawl, breaststroke, elementary backstroke, backcrawl stroke, and sidestroke. Increase cardiovascular fitness and endurance.

PE 222 Water Sports. (*Full semester*). *PE 113 or equiv. skill. 1(0-2) F,S.* Fundamental skills of water polo, water basketball, water volleyball and underwater hockey.

PE 223 Advanced Lifesaving. (*Full semester*). *Preq: PE 221 or equivalent. 1(0-2) F,S.* Designed to qualify students for a Red Cross Advanced Lifesaving certificate.

PE 224 Water Safety Instructors. (*Full semester*). *Preq: PE 223 or equiv. 1(0-2) F,S.* Designed to qualify students for a Red Cross Water Safety Instructor's rating.

PE 226 Skin and Scuba Diving I. (*Full semester*). *Preq: PE 221 or equivalent. 2(1-2) F,S,Sum.* Basic theory and skills related to skin and scuba diving. Emphasis on equipment, diving maladies, safety and physical conditioning for diving. Additional fee assessed for the open water experience and certification.

PE 227 Skin Diving Leader/Assistant Instructor. (*Full semester*). *Preq: PE 226. 1(0-2) F,S.* Designed to qualify students for a skin diving leader/assistant instructor Scuba Diving Rating.

PE 228 Springboard Diving. (*Full semester*) *Preq: PE 113 or equivalent skill. 1(0-2) F,S,Sum.* Individual development of the basic skills of one meter and three meter springboard diving.

PE 229 Swim Conditioning. (*Full semester*). *Preq: PE 113 or equivalent skill. 1(0-2) F,S,Sum.* Improvement of cardiovascular fitness through various aquatic training techniques.

PE 230 Judo. (*Full semester*). *1(0-2) F,S.* Introduction to basic Judo techniques.

PE 231 Body Conditioning and Aerobics. (*Full semester*). *1(0-2) F,S.* Instruction in exercise prescription, safety precautions during exercise and proper exercise technique.

PE 232 Personal Defense for Women. (*Full semester*). *1(0-2) F,S.* Physical and psychological techniques in defending against the violent physical attacks that women are most likely to encounter.

PE 233 Boxing. (*Half semester*). *1(0-2) F,S.* Fundamentals, skills, history and rules. Emphasis on defensive techniques.

PE 234 Square Dance. (*Full semester*). *1(0-2) F,S.* Coeducational course in square dance covering Mixers, Mountain Style Square Dance, Western Square Dance, Clogging, and American Heritage Dances.

PE 235 Karate. (*Full semester*). *1(0-2) F,S.* An introduction to traditional (Shotokan) Karate, providing instruction in basic techniques (kihon) of attacking, blocking, and counterattacking, sparring (Kumite), and formal drills (kata).

PE 236 Track and Field. (*Full semester*). *1(0-2) F,S.* Develops knowledge and appreciation of, and skill in track and field events.

PE 237 Weight Training. (*Full semester*). *1(0-2) F,S.* Provides essential knowledge of the principles of muscular strength development; and, an opportunity to acquire skill in a variety of progressive resistance exercises.

- PE 238 Wrestling.** (*Full semester*). 1(0-2) F,S. Wrestling skills, safety considerations, and conditioning factors necessary for moderate competition in a combative sport—beginning skills through more advanced techniques.
- PE 239 Modern Dance.** (*Full semester*). 1(0-2) F,S. Knowledge, skill and application of modern dance. Emphasizes the basic fundamentals of body movement executed to music.
- PE 240 Social Dance.** (*Full semester*). 1(0-2) F,S,Sum. Basic steps and fundamentals of leading and following in the Foxtrot, Waltz, Cha-Cha, Shag and Rumba.
- PE 241 Angling.** (*Full semester*). 1(0-2) F,S. Introduction to a variety of casting systems (spinning, bait-casting, fly-casting) and an understanding of inland fishing relating to North Carolina waters. Includes tackle and bait selection, N.C. laws and regulations, species identification and opportunities for field trips. Fee assessed for North Carolina fishing license.
- PE 242 Badminton.** (*Full semester*). 1(0-2) F,S,Sum. Skills development, strategies and rules of singles and doubles play.
- PE 243 Bowling.** (*Half semester*). 1(0-2) F,S,Sum. Instruction in ball selection, grip, stance, approach, delivery, bowling etiquette, safety precautions, rules, scoring, terminology, and general theory of spare coverage. Additional fee assessed.
- PE 244 Fencing.** (*Full semester*). 1(0-2) F,S. Development of offensive and defensive skills; emphasis on rules, courtesy, and strategy of boutng.
- PE 245 Golf.** (*Full semester*). 1(0-2) F,S,Sum. Fundamentals of golf: grip, stance, swing skills. Use of various clubs. Rules and etiquette of play.
- PE 246 Handball.** (*Full semester*). 1(0-2) F,S. Skills development, rules and strategies for singles and doubles play.
- PE 247 Roller Skating.** (*Full semester*). 1(0-2) F,S. Fundamental and intermediate skills of skating: starting, turning, stopping. Emphasis on balance and coordination with speed work.
- PE 248 Squash.** (*Half semester*). 1(0-2) F,S. Fundamental rules, skills, strategy, and play.
- PE 249 Tennis I.** (*Full semester*). 1(0-2) F,S,Sum. Basic tennis skills of grips, footwork, groundstrokes, service. Rules and basic strategy for singles play. Introduction to volleys, lobs, overheads, and doubles.
- PE 250 Tennis II.** (*Full semester*). *Preq: PE 249 or equivalent.* 1(0-2) F,S. Review of tennis skills and refinement of grips, footwork, groundstrokes, service, rules and basic strategies of singles and doubles. Emphasis on volleys, lobs, overheads, supplemental shots, active drills, and playing situations.
- PE 251 Target Archery.** (*Half semester*). 1(0-2) F,S,Sum. Emphasizes development of fundamental skills; including safety, competition, and selection and care of equipment.
- PE 252 Downhill Skiing.** (*Full semester*). 1(0-2) S. Fundamentals, safety, equipment selection and care, straight runs, turns, and slalom. Offered in January (semester break) at a ski site selected by the Department, with organizational meeting and 3 class meetings on campus prior to the trip. University pre-registration unnecessary. Additional fee assessed.
- PE 253 Orienteering.** (*Half semester*). 1(0-2) F,S. To teach the skills used in the sport of orienteering. Orienteering is the ability to navigate on foot from defined point to defined point, with use of map and compass, in the shortest possible time.
- PE 254 Beginning Equitation.** (*Full Semester*) 1(0-2) F,S. Beginning course emphasizing hunt seat equitation, care of horse and tack, and control skills at the walk, trot and canter. (Offered in conjunction with MacNair's Stables under supervision of Department of Physical Education). Additional fee assessed.
- PE 255 Canoe Tripping.** (*Full semester*). *Preq: PE 112 or equivalent.* 1(0-2) F,S. Instruction and experience in flat water canoe tripping skills emphasizing paddling skills, river travel techniques, safety, minimal impact camping techniques and proper equipment selection. Plan and participate in two required weekend field trips. Additional fee assessed.

PE 256 Racquetball. (*Full semester*). 1(0-2) F,S. Skills development, strategies and rules of singles and doubles play.

PE 257 Backpacking. (*Full semester*). 1(0-2) F,S. Instruction and direct experience in backpacking. Emphasis on safety, environmental conservation techniques, camping skills, and proper equipment selection. Two required weekend field trips. Additional fee assessed.

PE 258 Basic Rockclimbing. (*Half semester*). 1(0-2) F,S. Instruction and direct experience for the beginning rock climber. Includes required field trip. Emphasis is on safe rope systems for belaying and basic movement on rock.

PE 259 Intermediate Rock Climbing. (*Full semester*). *Preq: PE 258 or equivalent.* 1(0-2) F,S. Development of intermediate rock climbing skills, including partner and self rescue, lead climbing, training systems and field trip opportunities. Additional fee assessed.

PE 260 Lacrosse. (*Half semester*). 1(0-2) F,S. Designed to teach the history, rules, strategy and fundamental skills of Lacrosse.

PE 261 Basketball (Men). (*Half semester*). 1(0-2) F,S. Emphasizes offensive and defensive skills development and systems of team work. Includes coverage of history and rules of the sport.

PE 262 Basketball (Women). (*Half semester*). 1(0-2) F,S. Emphasizes offensive and defensive skills development and systems of team work. Includes coverage of history and rules of the sport.

PE 263 Tap Dance. (*Full semester*). 1(0-2) F,S. Fundamentals of tap dance. Emphasis on basic rhythmic exercises, traveling steps, and tap routines.

PE 264 Ballet. (*Full semester*). 1(0-2) F,S. Fundamentals of ballet. Emphasis on barre technique, exercises, steps *Au milieu* (center work without barre), and steps *Allegro*.

PE 265 Softball. (*Half semester*). 1(0-2) F,S,*Sum*. Fundamental skills, history and rules.

PE 266 Ultimate Frisbee. (*Half semester*). 1(0-2) F,S. Emphasis on skill development and competition. Includes flight dynamics, throwing, catching, offensive skills, defensive skills, equipment, and rules of the game.

PE 267 Touch Football (Men). (*Half semester*). 1(0-2) F,S. Skills, history, rules and strategy.

PE 268 Touch Football (Women). (*Half semester*). 1(0-2) F. Skills, history, rules and strategy.

PE 269 Volleyball. (*Full semester*). 1(0-2) F,S,*Sum*. Volleyball fundamentals: setting, passing, serving, spiking, court movement, and game strategy.

PE 271 Varsity Sports. *Preq: 1 hr. of P.E. credit.* (*Full semester*). 1(0-2) F,S. For students participating in a varsity sport during that sport's scheduled season.

PE 280 Emergency Medical Care and First Aid. (*Full semester*). 2(2-0). *This course does not constitute credit toward meeting physical education requirements.* F,S,*Sum*. Each student who satisfactorily completes the course requirements will receive the American Red Cross Standard First Aid and Personal Safety Certificate. Those students who rate superior in the areas of respiratory and cardiac emergencies will have the opportunity to complete the requirements for the American Red Cross Basic Life Support Certificate.

PE 281 Introduction to Athletic Training. *Preq: PE 280.* (*Full semester*). *This course does not constitute credit toward meeting physical education requirements.* 3(2-3) F,S. Examines the incidence, causes, prevention and treatment of sports-related injuries. Topics stressed are conditioning for sports, injury recognition and evaluation, taping techniques, first-aid care, treatment, and reconditioning of athletic injuries.

PE 285 Personal Health. (*Full semester*). *This course does not constitute credit toward meeting physical education requirements.* 2(2-0) F,S. A lecture-discussion course with emphasis on personal health including mental health, alcoholism, drugs, sexuality, nutrition, family health, diseases, health quackery and health practitioners.

PE 286 Nutrition, Exercise and Weight Control. *(Full semester). This course does not constitute credit toward meeting physical education requirements. 2(1-2) F,S.* A weight control program that emphasizes knowledge of nutrition, controlled eating habits and exercise. Individual weight loss prescribed.

PE 290 Athletic Officiating I. *(Full semester). This course does not constitute credit toward meeting physical education requirements. 2(2-0) F,S.* The rules and mechanics of athletic officiating in the sports of football, basketball, soccer, and softball/baseball. Practical work will include active officiating in the Intramural program.

PHILOSOPHY

(Also see REL—Religion.)

PHI 201 Logic. *3(3-0) F,S,Sum.* Introduction to the methods of deductive inference. Concepts of validity and implication defined and applied to statements and arguments.

PHI 205 Problems and Types of Philosophy. *3(3-0) F,S,Sum.* In this introductory course the matters discussed will always be those with a history of importance in philosophy, such as problems concerning God, freedom, justice, and the nature and objects of human knowledge.

PHI 250 Practical Reasoning. *3(3-0) F,Sum.* An introduction to nonformal reasoning; in particular, to induction and rational decision-making under conditions of uncertainty. Topics to be included are the analysis of causal connections, the nature of probability, the role of definition in language, and the examination of commonly committed fallacies.

METZGER

PHI 275 Ethics. *3(3-0) F.* An examination of the traditional questions of philosophical ethics: What sort of life is worthy of a human being, and what are the principles of moral conduct? Both classic and contemporary literature will be studied.

BRYAN

PHI 298 Special Topics in Philosophy. *3(3-0) F,S.* Selected studies in philosophy that do not appear regularly in the curriculum. Topics will be announced for each semester in which the course is offered.

PHI 300 Early Western Philosophy. *3(3-0) F.* The philosophical movements of Western Civilization from the pre-Socratics of ancient Greece to the scientific revolution of the 17th century, with particular emphasis on Plato and Aristotle.

PHI 301 Modern Western Philosophy. *3(3-0) S,Sum.* A critical survey of selected works of major Western philosophers of the 17th and 18th centuries: Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant.

METZGER

PHI (ED) 304 Philosophy of Education. *3(3-0) S. Alt. yrs.* Fundamental philosophical questions and concepts concerning education: What is the nature of education? What are its purposes? How are its nature and purposes related to the nature of knowledge? How are models of teaching justified.

BRYAN

PHI 305 Philosophy of Religion. *3(3-0) F,S.* An examination of the questions of the existence of God and of the language about God, including such traditional problems as verification, meaning, evil, immortality, and creation.

HAMBOURGER

PHI 306 Philosophy of Art. *3(3-0) S,Sum.* An analysis of the concepts and theories encountered in discussion of art in such a way as to illuminate the nature of works of art, esthetic experiences, and art criticism.

PHI 308 Contemporary Moral Philosophy. *3(3-0).* An exploration of contemporary philosophic treatment of such issues as the meaning of ethical terms like "good," "bad," "right," and "wrong," and the justification or validation of moral judgments.

PHI 309 Contemporary Political Philosophy. *3(3-0).* An examination of current discussions of basic concepts in political philosophy, such as liberty, equality, justice, natural rights, and democracy, with the aim of clarifying and resolving disputes concerning the relation of the individual to the state.

VANDEVEER

PHI 310 Existentialism. *3(3-0) S.* Discussion of the central existentialist motifs in the work of Kierkegaard, Nietzsche, Heidegger, Sartre, and others, and their influence upon contemporary culture. FITZGERALD

PHI 311 Philosophical Issues in Medical Ethics. *3(3-0).* Discussion of such issues as the morality of abortion, suicide, and euthanasia; the meaning and function of the concepts of health, illness, and death; psychological intervention; paternalism in medicine; consent and medical experimentation; and the allocation of scarce medical resources. The course considers individual rights and fairness and emphasizes conceptual clarity and the assessment of moral principles. VANDEVEER

PHI 312 Philosophy of Law. *3(3-0) F.* Fundamental issues concerning law such as what makes something a law or legal system and when legal interference with individual liberty is justified. Each philosophical issue tied to particular legal cases. LEVENBOOK

PHI 313 Ethical Problems in the Law. *3(3-0) S.* Explores the way participants in the legal system should act and to what uses the legal system should be put focusing on specific questions, for example: What, if any, is the moral basis for punishment, plea bargaining, civil disobedience, involuntary mental commitment, consensual sex crimes, fault in the criminal law? LEVENBOOK

PHI 314 Issues in Business Ethics. *3(3-0).* An analysis and evaluation of major issues in business ethics. Topics include the social responsibility of business; social justice and free enterprise; the rights and duties of employers, employees, manufacturers and consumers; duties to the environment, the world's poor, future generations, and the victims of past injustices; the moral status of the corporation; and the ethics of advertising. PIERCE

PHI 319 Twentieth Century Philosophy. *Preq: 3 hours PHI. 3(3-0) F.* History of contemporary analytic philosophy. Development of realism in the 20th century and the philosophical reactions to it. The attack on Idealism; the Extreme Realist reaction; Logical Positivism; Ordinary Language Philosophy; Phenomenology and the attack on Psychology.

PHI 321 Contemporary Moral Issues. *3(3-0) F,S,Sum.* Philosophical analysis and theory applied to a broad range of contemporary moral issues, including euthanasia, suicide, capital punishment, abortion, war, famine relief, environmental concerns. REGAN

PHI 322 Philosophical Issues in Environmental Ethics. *3(3-0) S.* An exploration of the nature and possibility of an environmental ethic. The course investigates the extent to which so-called "primitive" views of nature may contribute to such an ethic and examines the moral issues posed by land use planning, energy production and consumption, endangered species, food production policies, and obligations to future generations. REGAN

PHI 323 Nuclear Arms: Philosophical Issues. *3(3-0).* Alternative theories of rational decision making and morality considered in the context of the nuclear arms race.

CARTER

PHI 330 Metaphysics. *3(3-0) S.* An examination of metaphysical problems and questions, most of which have classical origins. These will usually be treated from a contemporary perspective. Typical problems are those connected with appearance and reality, free-will and determinism, mind and body, and space and time.

CARTER

PHI 331 Language, Mind, & Reality. *3(3-0).* An introduction to traditional and modern accounts of the relations between language and reality, and between language users and language. The nature of truth and linguistic meaning, the unique character of human knowledge of natural language and its acquisition, and the implications of such knowledge for psycho-linguistic theories of mind are among the topics covered. AUERBACH

PHI 333 Theory of Knowledge. *3(3-0) F.* Analysis of such central concepts as knowledge, belief, and truth, and the investigation of the principles by which claims to knowledge may be justified. CARTER

PHI 335 Symbolic Logic. *3(3-0) F,S.* Introduction to modern symbolic logic. Examination of the procedures for translating certain sentences into logical notation and for manipulating that notation to produce correct inferences. Also introduction to mathematical study of logic; properties of the symbolic system itself. AUERBACH, LEVIN

PHI 340 Philosophy of Science. *3(3-0) F,S.* Character and function of explanation in scientific activity, concepts of law and theory, role of inductive confirmation, and relationship between natural and social sciences.

PHI(MA) 402 Advanced Logic. *Preq: PHI 335 or CI. 3(3-0) S.* The formal study of truth and provability. Develops the basic results of mathematical logic by studying systems of formal logic in a mathematically rigorous way and by investigating one or more of the mathematical topics which rely on results from logic. Examples are the theory of the hyperreal number system (non-standard analysis) and the theory of computability (recursive function theory).

PHI 498 Special Topics in Philosophy. *Preq: Six credits in PHI. 1-6 F,S.* Detailed investigation of selected topics in philosophy. Topics determined by faculty members in consultation with head of the department. Course may be used for individualized study programs.

PHYSIOLOGY

Selected 500-Level Courses Open To Advanced Undergraduates

PHY (ANS) 502 Reproductive Physiology of Vertebrates. *Preq: ZO 421 3(3-0) S.*

PHY (ZO) 503 General Physiology I. *Preq: Sr. or grad. standing. 3(3-0) F.*

PHY (ZO) 504 General Physiology II. *Preq: Sr. or grad. standing. 3(3-0) S.*

PHY (ZO) 513 Comparative Physiology. *Preq: ZO 421 or CI. 3(3-0) S.*

PHY (ANS) 580 Mammalian Endocrine Physiology. *Preqs: BCH 451, ZO 421. 3(3-0) F. Even yrs.*

PEST MANAGEMENT

PM 111 Introduction to Integrated Pest Management. *Preq: BS 100. 2(2-0) S.* Origins, basic principles and objectives, current status and future expectations of integrated pest management (IPM) as a philosophy and technology important for everyone; emphasis on optimum use of natural resources, environmental integrity, and agricultural productivity. HANING

PM (BAE) 312 Principles and Practices of Pesticide Application. *Preqs: PY 211-212 or PY 221, and a course in crop production or crop protection. 3(2-3) F. Alt. odd yrs. (See Biological and Agricultural Engineering.)*

PM (SSC) 370 Alternative Agricultural Systems. *Preq: SSC 200. 3(3-0) S. Alt. even yrs.* Principles and methodologies of alternative agricultural systems (e.g. organic, biodynamic, biological, ecological, permaculture) as related to soil productivity and management, nutrient sources, energy, economics, pest management, pollution and current research. Explore the feasibility of alternative systems or combinations of alternative and conventional systems as viable methods for food and fiber production. KING

PM (MEA, FOR) 386 Agricultural and Forest Meteorology. *Preq: PY 211. 3(3-0) F. Alt. odd yrs.* Basic elements of meteorology: water and energy budgets; instrumentation. Applications selected from weather, remote sensing, irrigation scheduling, climatic classification, plant micrometeorology, meteorological decision-making. DAVIS

PM 405 Theory and Practice of Integrated Pest Management. *Preq: An introductory course in crop production or crop protection. Designed specifically for field practitioners such as county agricultural extension agents, agribusiness personnel, private consultants, etc.*

It will be offered only in the three-week summer session. 3(2-3) Sum. Basic theory and practice of integrated pest management for crop protection. Specific as well as up-to-date technical information necessary for understanding and implementing pest management programs and making sound pest management decisions. Appropriate laboratories, field trips and visits to existing crop pest management programs will be arranged. HANING

PM 415 Principles and Systems of Integrated Pest Management. *Preqs: BO (ZO) 360, PP 315, ENT 312; Coreq: CS 414. 4(3-3) F.* Origins, principles, objectives and methods of Integrated Pest Management (IPM) philosophy and technology for sound IPM decisions that consider short and long term economic, environmental, and social consequences. Representative IPM systems: urban, greenhouse, forest, turf, livestock, forage, orchard, field and horticultural crops. Laboratory includes field trips, discussion and computer-gaming sessions, and exercises in economics, sampling, and modeling. HANING

PM 490 Pest Management Seminar. *Preq: PM 415 or its equivalent. 2(1-1) S.* Written and oral reports on topics relating to the theory and practice of integrated pest management including the original development through student-group activity of a crop-pest management plan for an actual farm. HANING

PM 495 Special Topics in Integrated Pest Management. *Preq: PM 111. A total of only 6 hours of either PM 495 and/or ALS 400 can be applied towards B.S. degree requirements. 1-6, F,S,Sum.* Application in one or more of the following areas: intensive literature review, work-learning activity, or independent research with instructor guidance, oral presentations to special interest groups, or development of new ideas relating to IPM theory or practice. Projects are selected cooperatively with the Academic Coordinator. Written reports generally are expected. PM 495 may also be used to offer experimental courses.

Selected 500-Level Courses Open to Advanced Undergraduates

PM (PO, CS, ENT, PP) 525 Biological Control. *Preqs: CS 414, ENT 312 or 425, PP 315. 4(3-3) F. Alt. odd yrs.*

PM 590 Advanced Topics in Integrated Pest Management. *Preq: PM 405 or PM 415. 1-6 F,S,Sum.*

PM 595 Topical Problems in Integrated Pest Management. *Preq: PM 415. 2(1-2) S.*

POULTRY SCIENCE

PO 201 Poultry Science and Production. *Preq: BS 100. 4(3-3) F,S.* Fundamental principles of broiler, turkey and egg production including poultry physiology, breeding, incubation, housing, nutrition, disease control, management and marketing. PARKHURST

PO 204 Feeds and Feeding. *Preq: Sophomore standing. 4(3-3) S,Sum.* Applied nutrition of livestock and poultry. Digestion and function of nutrients. Classification, processing and use of feedstuffs. Formulation of rations to meet nutritional requirements. Demonstration of nutritional deficiencies. ORT

PO 301 Evaluation of Live Poultry. *Preq: PO 201. 2(1-3) S.* Experience in evaluating live poultry for production and breeder stock potential. Emphasis on techniques and criteria used in selecting poultry for use in commercial production units. PARKHURST

PO (FS, ANS) 322 Muscle Foods and Eggs. *Preq: BS 100. 3(2-3) F.* Processing and preserving fresh poultry, red meats, seafoods, and eggs. Ante- and post-mortem events as they affect quality, yield and compositional characteristics of muscle tissues. BALL

PO 351 Grading and Evaluation of Poultry Products. *Preq: PO 201. 2(1-3) F.* Experience in grading and evaluating poultry products, such as dressed broilers, fowl, turkeys, shell eggs and broken out eggs. PARKHURST

PO 405 Avian Physiology. *Preq: CH 220. 4(3-3) F.* The principles of avian physiology integrating the physiological processes and the associated anatomical structures that insure the homeostatic state in birds. EDENS

PO 410 Production and Management of Game Birds in Confinement. *Preq: PO 201. 3(2-3) S.* Management principles associated with the successful propagation and rearing of game birds, ornamental birds and waterfowl in confinement. Housing and pen requirements, nutrition, disease control and regulatory issues included. PARKHURST

PO (ANS, NTR) 415 Comparative Nutrition. *Preq: CH 220 or 221 and 223. 3(3-0) F.* Principles of nutrition, including the classification of nutrients and the nutrient requirements of and metabolism by different species for health, growth, maintenance and productive functions. DONALDSON

PO 420 Turkey Production. *2(1-2) S.* Principles and current practices of turkey production. CHRISTENSEN

PO 421 Commercial Egg Production. *2(1-2) S.* Principles and current practices of commercial egg production. ORT

PO 422 Incubation and Hatchery Management. *2(1-2) F.* Principles and current practices of incubation and hatchery management. BRAKE

PO 423 Broiler Production. *2(1-2) F.* Principles and current practices of broiler production. PARKHURST

PO 490 Poultry Seminar. *Preq: Senior standing. 1(1-0) F.* Topics related to current and possible future problems in poultry science and the poultry industry are assigned for oral report and discussion. Qualified guest lecturers are invited to present and discuss problem areas encountered in their responsibilities to the industry. ORT

PO 495 Special Problems in Poultry Science. *Preqs: Jr. standing and CI. 1-6 F,S,Sum.* Individualized study of problems in Poultry Science in the student's area of interest and not covered in scheduled courses. Emphasis will be placed upon student research problems developed with faculty approval. ORT

Selected 500-Level Courses Open To Advanced Undergraduates

PO 505 Physiological Aspects of Poultry Management. *Preqs: PO 201, PO 405 or grad. standing. 3(3-0) S.*

PO (GN) 520 Poultry Breeding. *Preq: GN 411. 3(2-2) S.*

PO (ZO) 524 Comparative Endocrinology. *Preq: ZO 421 or equivalent. 4(3-3) S.*

PLANT PATHOLOGY

PP 315 Principles of Plant Pathology. *Preq: BS 100. 4(3-3) F.* Induction, development and nature of plant diseases caused by fungi, bacteria, viruses, parasitic plants and abiotic factors. Physiological and ecological aspects of host/pathogen biology, and relationship among cultural practices, host resistance, and pesticides in disease control.

PP (FOR) 318 Forest Pathology. *Preq: BS 100 or equivalent. 4(3-2) S.* Major types of diseases of forest trees and deterioration of wood products are studied emphasizing: principles of plant pathology; symptomatology and diagnosis; nature of disease-causing agents; physiology, ecology and dissemination of disease-causing agents; mechanisms of pathogenesis; epidemiology and environmental influences; principles and practices of control. GRAND

PP 404 Plant Diseases and their Control. *Designed for agricultural extension agents, agribusiness personnel, consultants and students not enrolled in a Plant Pathology program. Offered off-campus at different locations at different times. 3(15-15).* Cause, diagnosis, principles, and control of major plant diseases. AVERRE

PP 415 Plant Disease Control. *Preq: PP 315. 3(2-3) S.* Principles and techniques of controlling plant disease. Disease resistant cultivars, useful cultural practices, pesticidal chemicals, quarantines, and equipment are emphasized. SUTTON

Selected 500-Level Courses Open To Advanced Undergraduates

PP 501 Phytopathology I. *Preq: PP 315 or equivalent. 5(3-6) F.*

PP 502A,B,C Phytopathology II. *Preq: PP 315 or equivalent. 6(3-6) S.*

PP 515 Epidemiology and Plant Disease Control. *Preq: PP 315 or PP 318. 3(3-0) S.*

PP (FOR) 518 Advanced Forest Pathology. *Preq: PP 318 or equivalent. 3(3-0) Alt. F.*

PP (BO, CS, ENT, PM) 525 Biological Control. *Preqs: CS 414, ENT 312 or 425, PP 315 4(3-3) F. Odd yrs.*

PP (MB, BO) 575 The Fungi. *Preq: BO 200 or equivalent. 3(3-0) F.*

PP (MB, BO) 576 The Fungi-Lab. *Coreq: BO 575. 1(0-3) F.*

PP 595 Special Problems in Plant Pathology. *Preq: CI. Credits Arranged, Maximum 6.*

POLITICAL SCIENCE

(Also see PA—Public Administration.)

PS 201 Introduction to American Government. *3(3-0) F,S,Sum.* The American federal system, integrating national and state governments, with emphasis on constitutional principles, major governmental organs, governmental functions, and the politics and machinery of elections. Some attention to other types of political systems, and comparisons made where relevant.

PS 202 State and Local Government. *3(3-0). F,S, Sum.* State and local governments within the context of the American federal system. Special emphasis on federalism, the constitutional/legal relationships between state and local governments, and the institutions, organizational forms, and political processes in American state and local government.
CIGLER, McCLAIN, WILLIAMS

PS 204 Problems of American Democracy. *3(3-0) S.* An examination of certain political problems in America from the perspective of political theory. Selected topics such as: the character of democracy, the relationship between economics and politics, racial and sexual equality, civil disobedience, and the proper scope of individual freedom.

KESSLER

PS 220 American Environmental Policies and Politics. *3(3-0) F.* An introduction to political and administrative aspects of environmental problems, with emphasis on American issues. Topics include: the nature and scope of environmental problems; the environmental movement; the role of public opinion and interest groups; policy making and decision-making; policy evaluation. A focus on selected problems such as energy, land use, toxic substances, and air and water pollution.
CIGLER

PS 231 International Relations. *3(3-0) F,S.* General patterns and attempted control of political interrelationships in the modern state system with emphasis on developments since World War II. Major focus on American and Soviet perceptions of the world, on their foreign policies, and on the increasing impact of Third World nations.

PETERSEN, TILMAN

PS 236 Issues in Global Politics. *3(3-0). F,S.* Major problems confronting the world community, political issues that they raise, and ways in which they are being addressed internationally. Problems include those related to poverty and economic development of the Third World; to population, food resources, the environment; and to wars, arms races, and arms control.

PETERSEN, SOROOS

PS 241 Introduction to Comparative Politics. *3(3-0) F,S.* Introductory comparative analysis of a selected variety of political systems always including some developed democracies, some communist states and some developing countries. A minimum familiarity with the American political system is assumed.

KEBSCHULL, PETERSEN

PS 250 Principles of Political Science. *3(3-0) F,S.* Survey of the nature and varieties of political behavior; concepts and theories of political science; the sources of political science information; and the comparative characteristics of political behavior and institutions, both within and among nation-states.
KEBSCHULL, PETERSEN

PS 298 Special Topics in Political Science. *3(3-0) F,S.* Utilized for guided research or experimental classes at the sophomore level.

PS 301 The President and Congress. *Preq: PS 201. 3(3-0) F.* The relationship between the President and Congress in the making of public policy with emphasis on the constitutional, institutional, partisan and personal bases for cooperation and conflict between the two. Emphasis on presidential-legislative interactions in a number of public policy fields.
HOLTZMAN

PS 306 Law and Courts in the American Political System. *3(3-0) F,S.* The role of state and federal courts in the political system, including: structure, court organization and legal personnel; the nature of law and its role in society; and functions performed by courts in the political system, from dispute settlement to the initiation of social change.
REID, ROSCH, RUBIN

PS 307 Introduction to Criminal Law in the United States. *3(2-2) F,S.* A broad survey of the general principles underlying the criminal law in the United States. Attention is paid to the classification of crimes, the criminal act, factors affecting criminal responsibility, and various types of offenses. Includes observation of state and federal court sessions as appropriate.
RUBIN

PS 308 Supreme Court and Public Policy. *3(3-0) F,S.* The role of the Supreme Court in American politics, with particular emphasis on the way groups use litigation as a form of political activity. Readings include relevant court cases as well as descriptions of the Supreme Court in action.
REID, ROSCH, RUBIN

PS 310 Public Policy. *3(3-0) F.* Introduction to public policy formulation and analysis, including agenda-setting strategies, problems of legitimation, the appropriations process, implementation, evaluation, resolution, and termination.
WILLIAMS

PS 311 Criminal Justice Policy Process. *3(3-0) F,S.* Formulation and implementation of policies in various criminal justice institutions. Police agencies, solicitors' offices, courts, prisons and probation and parole departments as public bureaucracies, and interactions of key officials.
FAIRCHILD, ROSCH.

PS 312 Introduction to Public Administration. *Credit for PS 312 and PS 511 is not allowed. 3(3-0) F,S.* An introductory survey of the role of public administration in modern society. Emphasis is placed on the study of the effectiveness and responsiveness of bureaucracies. Case study analysis is among the techniques used to examine such topics as the politics of city, state, and federal bureaucracy; people in bureaucracies; bureaucracy in policy areas; ethics and responsibilities.

PS 314 Science, Technology and Public Policy. *3(3-0) F,S.* Societal impacts of current science and technology. U.S. and foreign governmental policy processes and responses. The role of science and technology in alleviating resource scarcities. A comparison of domestic with international science and technology issues.

PS 331 U. S. Foreign Policy. *3(3-0) F,S,Sum.* The content, formulation, and execution of U.S. foreign policy during the postwar period, with concentration on major issues and trends, the instruments for implementing foreign policy, and analysis of the policymaking process.
GILBERT

PS 332 Soviet Foreign Policy. *3(3-0) F,S.* Elements of continuity and change in Soviet foreign policy are examined within the context of Soviet ideology and national interest. Special attention is given to the decision-making structures within the Soviet Union and to relations with the West since World War II.
MASTRO

PS 336 Global Environmental Politics. *3(3-0) F,S.* Political aspects of global ecological problems, particularly population, food, energy, minerals, renewable resources, pollution, and extinction of species. Relevant national and international policies, including management of oceans, the seabed, Antarctica, and outer space. SOROOS

PS 342 Political Systems of China and Japan. *3(3-0) S.* A comparative analysis of the structure and processes of politics in China and Japan. PETERSEN

PS 343 Southeast Asia: Internal Politics and External Relations. *3(3-0).* Domestic and international politics in the region from Burma to the Philippines. Contemporary issues involving relations among Vietnam, ASEAN, China, Japan, the USSR, and the USA in the context of the internal political dynamics of the ten countries of Southeast Asia. TILMAN

PS 344 Soviet Politics. *3(3-0) F,S.* Focus of the course is on the contemporary Soviet political system, its structure, functions, and processes, with a brief consideration of the historical and ideological base of Soviet politics. Comparisons are made with other political systems. The Soviet system is tested against the totalitarian, bureaucratic, and conflict theoretical models. MASTRO

PS 345 Governments and Politics in the Middle East. *3(3-0) S.* Contemporary politics of the Middle East. Emphasis on the historical, geographic, religious, and political-economic factors of the region and the individual countries. Attention to the foreign policies of the superpowers in the region as well as to the Arab-Israeli conflict, Middle Eastern oil, and revolutionary developments in Iran and elsewhere.

PS 361 Introduction to Political Theory. *3(3-0) F,S.* Basic questions about the nature and purpose of politics, as treated by such writers as Plato, Aristotle, St. Augustine, Machiavelli, Locke, Rousseau, Tocqueville, Marx, and Nietzsche. KESSLER

PS 362 American Political Thought. *3(3-0) F,S.* American ideas and institutions as viewed from the perspective of great American political thinkers, including Thomas Jefferson, James Madison, Alexander Hamilton, Henry David Thoreau, Abraham Lincoln, Franklin Roosevelt, Frederick Douglass, and Malcolm X. KESSLER

PS 371 Research Methodology of Political Science. *Preq: PS 201. 3(3-0) F,S.* Principles and procedures of political science research including the philosophy of science; theory construction; sampling, measurement and research designs; computer applications, main-frame and microcomputing. O'SULLIVAN, VASU, WILLIAMS

PS 374 Microcomputer Applications in Political Science. *Preq: Sophomore standing and 3 hours PS. 3(3-0) F.* An introduction to microcomputer applications in political science. GARSON

PS 401 American Parties and Interest Groups. *3(3-0) F,Sum.* Impact of American political system upon parties and interest groups; their influence upon that system. American parties and interest groups as instruments for mobilizing electorates, choosing and organizing government leaders, affecting public policy and administration. Strategies, tactics and problems of American parties and interest groups. HOLTZMAN

PS 402 Campaigns and Elections in the American Political System. *Preq: PS 201. 3(3-0) F,S.* Deals with the nature and functions of campaigns and elections in the American political system. Among the topics to be explored are American electoral behavior, techniques of political campaigning, recent reforms in campaign financing, the role of political parties in campaigns and elections, the classification of elections, with particular concern directed to the concepts of "issue voting" and "realignment." DORFF

PS 406 Politics and Policies of American State Governments. *3(3-0) F,S,Sum.* A comparative study of the politics and policies of the 50 states. Socioeconomics and political variations and state response to intergovernmental domestic programs. An analysis of state policy, e.g., in the areas of criminal justice, health, transportation, regulation and urban planning. CIGLER, McCLAIN, WILLIAMS

PS 408 Urban Politics. *3(3-0) S.* An introduction to politics and policies in urban areas. Topics include comparisons among rural and urban areas, various regions of the U.S., and communities of varying size. The course embodies both an intergovernmental and a policy approach. Policy topics included are planning and growth management, education, housing, welfare, health, transportation, environmental and energy issues, and public safety.

CIGLER

PS 411 Public Opinion and the Media. *Preq: Six hours of social science. 3(3-0) F.* A study of forces affecting public opinion and its expression in various political activities; the personal needs served by political participation and the effect of formal political institutions and social structure upon public opinion, as well as the effects of public opinion policy.

DORFF, VASU

PS (SOC) 413 Criminal Justice Field Work. *Preqs: Acceptance in criminal justice option; senior standing; SOC 306 and PS 311. 4(2-8) F,S.* (See Sociology.)

PS 415 Administration of Criminal Justice. *Preq: PS 311. Credit will not be given for both PS 415 and PA 515. 3(3-0) F.* A study of politics and administration in the American criminal justice system. The interrelationships between ideology, organization, and policy outputs are emphasized in the analysis of major problems confronting the system today. Topics included are: intergovernmental relations, discretionary justice, impact of judicial decisions on criminal justice administration, and management trends in criminal justice bureaucracies.

FAIRCHILD, ROSCH

PS 431 International Law and Organization. *3(3-0) S.* The nature, development and function of international law and international organization as applied to international conflict and cooperation. Special emphasis on the United Nations as both a legal and a political instrument.

PETERSEN

PS 433 Global Problems and Policy. *Credit may not also be received for PS 533. 3(3-0) F.* International policy processes and policy responses to problems of global scope, including economic developments, human rights, and other policy problems selected for specific semesters. Independent research on a global policy problem of student's choice.

SOROOS

PS 437 National Security Policy. *Preq: PS 331. 3(3-0) S.* An examination of the formulation and implementation of contemporary United States national security policy. Emphasis is on defense policy, and attention is also given to economic issues.

DORFF, GILBERT

PS 441 Military Coups & Regimes in the Third World. *Preq: Six hours of political science. Credit may not also be received for PS 541. 3(3-0).* The seizure exercise of political power by military forces in Asia, Africa, and Latin America. Causes and techniques of military coups with emphasis on the social, economic and political policies of military regimes. Case studies within the context of theories about the political role of the military.

KEBSCHULL

PS 442 Western European Politics. *Preq: 6 hours political science. Credit will not be given for both PS 442 and PS 542. 3(3-0) F.* Political institutions and processes in selected Western European states and in the European Community. Major social, economic and political issues confronting European societies.

KEBSCHULL

PS 445 Comparative Systems of Law and Justice. *Preq: PS 311. 3(3-0) S.* An introduction to the study of legal culture and administration of justice in Western European and Communist political systems, with a view to comparison with the American system of law and justice. The impact of legal ideology on such topics as political justice, police administration, corrections, and judicial processes is emphasized.

FAIRCHILD, ROSCH

PS 446 Comparative Communist Systems. *Preq: PS 344 or 332. 3(3-0) S.* A study of the international Communist movement and the evolution of the international sub-system of Communist states. Focuses on the Soviet and Chinese systems as alternative models for development in Communist and non-Communist states. Additional emphasis is placed on the institutional, political and ideological similarities and differences within the Communist world and major Communist parties outside the Communist state system.

MASTRO

PS 462 Seminar in Political Theory. *Preq: PS 361. 3(3-0) S.* Examination of a special area in political theory through the careful reading of selected texts, independent research, and the preparation of seminar reports. Topics for the seminar, which will vary from year to year, include ancient and modern political thought, democratic theory, and political theory in literature. **KESSLER**

PS 471 Survey Research. *Preq: PS 371. 3(3-0) S.* Introduction to methods of survey research employed in public opinion polls, campaign management, media and market research, needs assessment and program evaluation. Attention focuses on sampling, questionnaire design, coding, data processing, as well as elementary data analysis. The course employs data from national organizations such as Harris and Gallup Polls, as well as exposes students to applied techniques. **GARSON, VASU**

PS 490 Readings and Research in Political Science. *Preq: Consent of department. 1-6 F,S.* To enable undergraduate students to pursue a subject of particular interest to them by doing extensive readings or research in that subject under direct, individual faculty supervision.

PS 491 Internship in Political Science. *Preq: Consent of department. 1-6 F,S,Sum.* Internship in a governmental agency, interest group, or like organization involves seminar or formal report. **McCLAIN**

PS 492 Honors Readings and Thesis in Political Science. *Preq: Admission to Honors Program and CI. Enrollment limited to Political Science honors majors. 3-6 F,S,Sum.* Independent reading and preparation of an honors thesis. Topic and mode of study to be determined by the student and a supervising faculty member.

PS 498 Special Topics in Political Science. *Preq: Six hours PS. 3-6 F,S.* Detailed investigation of a topic. Topic and mode of study determined by the student and a faculty member.

Selected 500-Level Courses Open To Advanced Undergraduates

PS 502 The Legislative Process. *Preq: Advanced undergrad. standing including 12 hours of political science, grad. standing or PBS status. 3(3-0) S.*

PS 506 American Constitutional Theory. *Preq: Advanced undergrad. standing including 12 hours of political science, grad. standing or PBS status. 3(3-0) F.*

PS 507 Constitutional Theory II. *Preq: Advanced undergrad. standing including 12 hours of political science, grad. standing or PBS status. 3(3-0) F,S.*

PS 512 Comparative Administration. *Preq: PA 511 or PS 346 or CI. 3(3-0) F,S.*

PS 514 Public Finance. *Preq: EB 205. 3(3-0) F.*

PS (SOC) 517 The Police Bureaucracy in a Democratic Society. *Preq: Advanced undergrad. standing including 12 hours of political science, grad. standing or PBS status. 3(3-0) S.*

PS 531 International Law. *Preq: Grad. or advanced undergrad. standing. 3(3-0).*

PS 561 Ancient Political Theory. *Preq: Advanced undergrad. standing including 12 hours of political science, grad. standing or PBS status. 3(3-0) F.*

PS 562 Modern Political Theory. *Preq: Advanced undergrad. standing including 12 hours of political science, grad. standing or PBS status. 3(3-0) S.*

PS 563 Power and Ideology. *Preq: Advanced undergrad. or grad. standing. 3(3-0) F.*

PS 569 Topics in Political Theory. *Preq: Advanced undergrad. standing including 12 hours of political science, grad. standing or PBS status. (Maximum of 6 hours may be taken). 3(3-0) F,S.*

PS 571 Research Methods and Analysis. *Preqs: Advanced undergrad. standing including 12 hrs. of PS, grad. standing or PBS status. 3(3-0) F,S.*

PS 598 Special Topics in Political Science. *Preq: 6 hours of political science. 1-6 F,S.*

PSYCHOLOGY

PSY 200 Introduction to Psychology. 3(3-0) F,S,Sum. Survey of basic principles for the understanding of behavior and experience including development, learning, cognition, biological foundations, perception, motivation, personality, behavior abnormalities, measurement of individual differences, and social processes. The value of scientific observation and experimentation to the development of psychological understanding is emphasized.

CUNNINGHAM, KALAT, LUGINBUHL, MERSHON, POND

PSY 210 Psychological Analysis Applied to Current Problems. *Preq: PSY 200.* 3(3-0) F,Sum. Explores the psychological bases of certain current social problems. Emphasis is on review of pertinent literature and planning simple research projects. Problems studied from a set of relevant problems: violence and aggression, equal rights for women, attitude change, rehabilitation, population growth, service delivery systems, etc. The interests and abilities of students and teacher and availability of literature will be the principal criteria for problem selection. Juniors and seniors are advised to take PSY 412 rather than PSY 210. SMITH

PSY (ST) 240 Introduction to Behavioral Research I. *Preq: PSY 200; Coreq: PSY (ST) 241.* For PSY and HRD majors only. 3(3-0) F. Introduction to the scientific approach in psychology, including experimental control, validity, variability, and fundamentals of research design. Includes discussion of distributions, correlation and regression, and statistical inference. COLE, KLEIN

PSY (ST) 241 Introduction to Behavioral Research I Lab. *Preq: PSY 200; Coreq: PSY (ST) 240.* For PSY and HRD majors only. 2(0-4) F. This laboratory allows students to design, analyze and report a variety of simple experiments. COLE, KLEIN

PSY (ST) 242 Introduction to Behavioral Research II. *Preqs: PSY (ST) 240, 241; Coreq: PSY (ST) 243.* For PSY and HRD majors only. 3(3-0) S. Deals with complex research designs and their analysis, development of scales and other instruments, physiological measures, and the use of computers for control, data gathering and analysis. COLE, KLEIN

PSY (ST) 243 Introduction to Behavioral Research II Lab. *Preqs: PSY (ST) 240, 241; Coreq: PSY (ST) 242.* For PSY and HRD majors only. 1(0-2) S. This laboratory involves students in the design and analysis of a major research project. COLE, KLEIN

PSY 300 Perception. *Preqs: PSY 200.* 3(3-0) S,Sum. An introduction to anatomy and physiology of major sensory systems, their relation to central structures, and basic problems dealt with by psychophysics. Examination of the chief determiners of perception, including both stimulus variables and such organismic variables as learning, motivation, and attention. The discussion of perceptual theory and processes emphasizes topics in two- and three-dimensional spatial perception. MERSHON

PSY 304 Educational Psychology. 3(3-0) F,S,Sum. An introduction to psychological principles that apply to education. These principles include: cognitive and personality development, motivation, classroom management, learning, memory, thinking and problem solving, measurement and evaluation, individual differences, intelligence, exceptionality and multicultural education. HESS

PSY 307 Industrial and Organizational Psychology. *Preq: PSY 200.* 3(3-0) S. Surveys the application of psychological theories and methods to problems involving people in working settings. Topics include: organizational and management theory; work motivation and job satisfaction; job and organizational analysis; performance evaluation; personnel recruitment, selection, and placement; and personnel training and development. CUNNINGHAM

PSY 310 Learning and Motivation. *Preq: PSY 200.* 3(3-0) F,Sum. Introduction to the primary laboratory research areas in learning and motivation: classical conditioning, operant conditioning, verbal learning, drive theory, and the role of motives. Emphasis upon research on conditioning and its motivational processes as the foundations for techniques in behavior modification. Examination of both the uses and limitations of current information on learning and motivation. COLE

PSY 320 Cognitive Processes. *Preq: PSY 200. 3(3-0) F,S,Sum.* Introduction to research and theory in cognition including such topics as memory, acquisition and use of language, reading, problem solving, reasoning, and the acquisition and use of concepts. NEWMAN

PSY 330 Biological Psychology. *Preq: PSY 200. 3(3-0) S.* Biological mechanisms of behavior, including elementary neuroanatomy and neurophysiology, sensory and motor processes, and their application to motivation, learning, and psychological processes. KALAT

PSY 340 Environmental Ergonomics. *Preqs: PSY 200, PSY 300 or 307 recommended. 3(3-0) S.* Concepts from ergonomics, environmental psychology, and industrial psychology are related through design examples to problems of everyday living. Criteria of efficiency, comfort, safety, and health of people at work and leisure are evaluated relative to the design of activity, products, and environments. Topics include: fatigue, mood, boredom, stress; home design; consumer products; factory and office work design; noise and lighting. YEH

PSY 350 Human Resource Development Skills. *Preq: Junior standing; Coreq: PSY 495, SP 112. For HRD majors only. 3(3-0) F.* Instruction, practice and development of skills in the psychology of behavior observation, interviewing, instruction and organizing. Emphasis on issues relevant to human service providers in public and private settings. GRAY

PSY 370 Personality. *Preq: PSY 200. 3(3-0) F,S,Sum.* Major personality theories. Definition of personality associated with each theory as well as the assumptions and principles used in accounting for human behavior. Theories evaluated considering recent research. HORAN

PSY 376 Human Growth and Development. *Preq: PSY 200 or 304. 3(3-0) F,S.* Behavioral development during life span, including study of current theories and project work with persons at various stages of the life cycle. BAKER-WARD, SCOTT-JONES, SNYDER

PSY 411 Social Psychology. *Preq: PSY 200. 3(3-0) F.* Basic theory and research on how the average person responds to social stimuli, and how these responses are perceived and responded to by others. Topics include affiliation, attraction, interpersonal perception, altruism, aggression, attitude formation and change, conformity, group dynamics, and environmental psychology. LUGINBUHL

PSY 412 Psychological Research Applied to Current Problems. *Preqs: PSY 200 and ST 311. 3(3-0) S.* Emphasis from a psychological perspective is given to application of conceptual and technical skills relevant to understanding and acting on social problems. Basic material will include: governmental agencies and social action, models of behavior systems, research techniques and computer-based data processing. Specific social problems will be selected for class demonstration projects. The interests and abilities of students and teacher will be the principal criteria for project selection. SMITH

PSY 435 Measurement and Evaluation in the Classroom. *Preqs: PSY 200, 304. Junior or senior status. 3(3-0) S, Alt. Yrs.* Designed especially for prospective teachers. Topics include (1) constructing tests used in classes; (2) selecting and using standardized tests; (3) assigning valid grades; (4) using tests to augment instruction; (5) dealing effectively with evaluation of students' attitudes and opinions. WESTBROOK

PSY 436 Introduction to Psychological Measurement. *Preqs: PSY 240 sequence or ST 311. 3(3-0) S, Alt. yrs.* Emphasizes measurement in the science of psychology, controlled experiments, and studies of individual differences. Principles relating to applied problems are discussed, but more emphasis is placed on principles which relate to psychology as a science. WESTBROOK

PSY 470 Abnormal Psychology. *Preq: PSY 200 or 304. 3(3-0) S,Sum.* Common psychological disorders of children and adults. Historical and theoretical perspectives on abnormal behavior; issues of assessment and classification; etiology, symptoms, and treatment of disorders. ERCHUL

PSY 475 Child Psychology. *Preq: PSY 200 or 304. 3(3-0) F,Sum.* Intellectual, social, emotional and personality development of the child. Physical growth discussed as needed for an understanding of the psychologic development of the child.

BAKER-WARD, HESS

PSY 476 Psychology of Adolescent Development. *Preq: PSY 200 or PSY 304. 3(3-0) F,S,Sum.* Theories, principles, and issues related to human psychological development and emphasizing the period of adolescence. Consideration of cognitive, social, and physiological changes; their interaction; and implications for the teaching and parenting of adolescents.

SCOTT-JONES, SNYDER

PSY 491 Special Topics in Psychology. *Preq: PSY 200. 3(3-0) F,S.* Course will provide opportunity for exploration in depth of advanced areas and topics of current interest.

PSY 495 Human Resource Development Practicum. *Preq: Jr. standing. For HRD majors only. 3-8 F,S.* Field experience in the use of skills acquired during the skill semester. The student will work at an off-campus site during two consecutive semesters. GRAY

PSY 498 Psychology Honors Seminar. *Preq: Permission of department. Psychology honors students only; students to enroll for two semesters. 3(1-4) F,S.* Seminar and independent study under faculty direction. Provides the undergraduate psychology honors students with opportunity to practice skills in designing, conducting, and evaluating research. The student, working closely with a faculty advisor, will design a research approach to a particular body of literature, will accumulate appropriate data, and will analyze and evaluate the data.

PSY 499 Individual Study in Psychology. *Preq: Consent of department. 1-6 F,S.* Any undergraduate student may suggest an activity (a literature review, designing and conducting an experiment or survey, etc.) to a professor. After discussing the activity, if both student and professor agree that it is worthwhile and that the student is competent to undertake it, and if the professor is willing to direct the activity, then the student may enroll.

Selected 500-Level Courses Open To Advanced Undergraduates

PSY 502 Physiological Psychology. *Preq: Twelve hours of PSY including PSY 200, 300, 310. 3(3-0) F.*

PSY 503 Comparative Psychology. *Preq: 9 hours in PSY or animal behavior or CI. 3(3-0) S.*

PSY 504 Advanced Educational Psychology. *Preq: Six hours of PSY. 3(3-0) F.*

PSY 505 History and Systems of Psychology. *Preqs: PSY 200, 300, 310, 320 or CI or grad. status. 3(3-0) S.*

PSY 530 Advanced Abnormal Psychology. *Preqs: PSY 200, 370. 3(3-0) S.*

PSY 532 Psychological Aspects of Exceptionality. *Preq: CI. 3(3-0) S,Sum.*

PSY 533 Biological Factors in Abnormal Behavior. *Preqs: 6 hours of PSY and 6 hours of biology. 3(3-0) Alt. Sum.*

PSY 535 Tests and Measurements. *Preq: Six hours of PSY. 3(3-0) F,S.*

PSY (IE) 540 Human Factors in Systems Design. *Preq: IE (PSY) 338 or IE 354; Coreq: ST 507 or 515. 3(3-0) F.*

PSY 565 Organizational Psychology. *Preq: Nine hours of PSY. 3(3-0) F.*

PSY 576 Developmental Psychology. *Preq: Nine hours of PSY, including PSY 376, PSY 475 or PSY 476. 3(3-0) F.*

PSY 577 Adolescent Development. *Preq: Six hours of PSY or CI. 3(3-0) S, Alt. Sum.*

PSY 578 Individual Differences. *Preq: Six hours of PSY. 3(3-0) Alt. S.*

PSY 591 Special Topics in Psychology. *Preq: 6 hours of PSY; Coreq: 3 hours of ST. 1-3 F,S.*

PSY 594 Area Seminar in Human Resources Development. *Preq: CI. 1-3, Max. 6. F,S.*

PHYSICS

PY 101 Perspectives on Physics. *1(1-0) F.* An orientation in the current practice of physics, including discussion of historical background, scientific viewpoint, current topics, and careers in physics. Visits to departmental research laboratories. PAESLER

PY 201 General Physics. *Preq: MA 102; Coreq: MA 201. 4(3-3) S.* First course of three semester sequence for students majoring in physical and mathematical sciences. Calculus is used throughout. Principles of classical Newtonian mechanics are covered in detail.

PY 202 General Physics. *Preqs: PY 201, MA 201. 4(3-3) F.* Second course of three semester sequence designed primarily for students majoring in physical and mathematical sciences. Calculus is used throughout. Principles of electricity and magnetism are covered in detail.

PY 203 General Physics. *Preqs: PY 202, MA 202. 4(3-3) S.* Third course of three semester sequence designed primarily for students majoring in physical and mathematical sciences. Calculus is used throughout. Principles of wave optics and modern physics are covered in detail.

PY 204 General Physics. *Preq: MA 102. Credit cannot be earned for both PY 204 and PY 205. 3(3-0).* Introduction to Physics, including the study of mechanics, sound, heat, and thermodynamics. The analytical approach is employed, with emphasis on problem solving. Identical to PY 205, except that there is no laboratory. Offered only through Independent Study by Extension. JENKINS

PY 205, 208 General Physics. *Preq: MA 102. Required in most engineering curricula. 4(3-3) F,S,Sum.* A study of classical and modern physics in which the analytical approach is employed. Demonstration lectures, recitations, problem drill and laboratory work give a working knowledge of basic principles. PY 205, mechanics, sound and heat; PY 208, electricity, light and modern physics.

PY 206 General Physics Laboratory. *Preq: PY 204. Enrollment subject to approval of Physics Department, and limited to students who have passed PY 204. Not open to students having credit for PY 205. 1(0-2) F,S,Sum.* Laboratory part of PY 205. Approximately ten experiments taken from the fields of mechanics, sound, heat and thermodynamics.

PY 207 General Physics. *Preq: PY 205 or PY 204. Credit cannot be earned for both PY 207 and PY 208.* Introduction to Physics, including the study of electricity and magnetism, optics, and modern physics. The analytical approach is employed, with emphasis on problem solving. Identical to PY 208, except that there is no laboratory. Offered only by correspondence. JENKINS

PY 209 General Physics Laboratory. *Preq: PY 207. Open only to students who have passed PY 207. Not open to students who have credit for PY 208. Enrollment subject to approval of Physics Department.* Laboratory part of PY 208. Approximately 10 experiments taken from the field of electricity and magnetism, optics, and modern physics.

PY 211 General Physics. *(Non-Calculus) Preq: MA 111 or 116. Credit not allowed for both 211 and either 201 or 205. 4(3-2) F,S,Sum.* First semester of a two semester introductory sequence in non-calculus physics, with laboratory. Mechanics, heat, wave motion and sound.

PY 212 General Physics. *(Non-Calculus) Preq: PY 211; Credit not allowed for both 212 and either 202 or 208. 4(3-2) F,S.* Second semester of a two semester introductory sequence in non-calculus physics, with laboratory. Electricity, and magnetism, light, modern physics.

PY 221 College Physics. *Preq: MA 111 or 115. 5(5-0) F,S,Sum.* Principles of physics, qualitative and detailed quantitative approaches to the analysis of problems. Classroom demonstrations.

PY 223 Astronomy. *3(3-0) F,S,Sum.* An introductory, descriptive survey of the field of astronomy, designed primarily for the non-science major. History of astronomy; the solar system, with current results from space probes; the sun and other stars, galaxies; and cosmology. Exotic recent discoveries such as quasars, pulsars, and black holes included. A companion laboratory course (PY 225) offers an introduction to astronomical observing.

COBB

PY 225 Astronomy Laboratory. *Coreq: PY 223. 1(0-2) F,S.* Introduction to astronomical observing. Twelve exercises include astronomical instruments; the nature of light; Kepler's and Newton's laws of motion; the constellations; planets, binary stars, stellar clusters, and galaxies. Use of small telescopes to observe celestial objects.

PY 228 Introduction to Stellar Astrophysics. *Preq: PY 202 or PY 208. 3(3-0) S.* Introduction to the study of stars, galaxies, and the universe. Stars and stellar evolution; interstellar medium; galaxies and galaxy cluster; cosmology. Recent developments in the understanding of neutron stars, black holes, active galaxies, quasars, and inflationary cosmologies.

PY 299 Special Problems in Physics. *Preq: Consent of department. 1-3. F,S.* Study in experimental or analytical topics in classical and modern physics.

DOGETT

PY 231 Physics for Non-Scientists. *For humanities and social science students only. 4(3-2) F,S,Sum.* The history, philosophy, methods and fundamental concepts of physics with applications to everyday modern living. Topics in mechanics, heat, electricity, light, relativity, quantum concepts, and atomic and nuclear phenomena.

PY 240 Exophysics. *Preq: One of PY 201, 205, 211, 223. 3(3-0) F.* A wide range of principles of physics is employed to examine problems in exophysics. Topics include conditions for life on other planets, possibility of extraterrestrial intelligence and the problems of interstellar communications.

MITCHELL

PY 401, 402 Quantum Physics I, II. *Preq: PY 411. 3(3-0) F,S.* An introduction to the basic principles of quantum physics with an emphasis on selected applications to atoms, molecules, solids, nuclei, and elementary particles.

PY 407 Introduction to Modern Physics. *Preqs: MA 202, PY 208. 3(3-0) F,S.* Major developments in modern physics: special relativity, origin of the quantum theory, atomic and molecular structure, structure of solids, properties of nuclei and elementary particles.

PY 410 Introduction to Modern Physics for Nuclear Engineers. *Preqs: PY 202 or 208; NE 202; Credit for both PY 203 and either 407 or 410 is not allowed. 3(3-0) S.* Atomic and nuclear physics fundamentals for nuclear engineering students. Simple concepts of relativity; quantization of charge, light and energy; the nuclear atom and the Bohr model of the hydrogen atom; the wave nature of matter; the Schrodinger equation; atomic physics; properties of nuclei, nuclear reactions and nuclear models.

SEAGONDOLLAR

PY 411 Mechanics I. *Preqs: PY 203 or 208, MA 301. 3(3-0) F.* First semester of a two semester sequence in intermediate classical mechanics of particles and systems of particles. Solutions of problems in Newtonian mechanics; one dimensional motion; linear, damped, driven oscillations; two particle collisions; introduction to Lagrangian and Hamiltonian dynamics.

PY 412 Mechanics II. *Preq: PY 411. 3(3-0) S.* Continuation of PY 411 with emphasis on Lagrangian techniques: central force motion, rotating coordinate systems, rigid body dynamics, coupled oscillations. Elements of special relativity.

PY 413 Thermal Physics. *Preqs: PY 203 or 407, MA 301. 3(3-0) S.* An introduction to statistical mechanics and thermodynamics. The statistical study of physical systems emphasizing the connection between the statistical description of macroscopic systems and classical thermodynamics. Concepts of heat, internal energy, temperature and entropy. Classical and quantum statistical distributions.

PY 414 Electromagnetism I. *Preqs: PY 203 or 208, MA 301. 3(3-0) F.* The first semester of a two semester sequence. An intermediate course in electromagnetic theory using the methods of vector calculus. Electrostatic field and potential, dielectrics, solution of Laplace's and Poisson's equations, magnetic fields of steady currents.

PY 415 Electromagnetism II. *Preq: PY 414. 3(3-0) S.* A continuation of PY 414. Electromagnetic induction, magnetic fields in matter, Maxwell's equations, wave guides, radiation.

PY 441 Spacetime Physics. *Preq: PY 203 or 407. 3(3-0) S.* Introduction to spacetime physics in accordance with Einstein's special theory of relativity: time dilation, twin paradox, Doppler effect, relativistic space travel, four-vectors, relativistic momentum and energy conservation laws in high energy physics. Consequences of Einstein's gravitational theory in cosmology: models of the expanding universe, neutron stars, black holes and the "big bang" hypothesis.

PY 451 Electronics for Physicists. *Preq: PY 414; Coreq: PY 415. 3(1-4) S.* Analog and digital electronics laboratory course serving as an introduction to the use of modern instrumentation required for experimental research in physics. Bipolar and field effect transistors, operational amplifiers, oscillators, power supplies, analog-digital and digital-analog conversion, and digital logic circuits. COBB

PY 452 Advanced Physics Laboratory. *Preqs: Senior standing and consent of department. 1(0-3) F,S.* Experiments in mechanics; electromagnetism; optics; and atomic, nuclear, plasma, and solid state physics. GOULD

PY 499 Special Problems in Physics. *Preq: Consent of department. 1-6 F,S,Sum.* Study and research in classical and modern physics. Topics for experimental or theoretical investigation, or a literature survey.

Selected 500-Level Courses Open To Advanced Undergraduates

PY 506 Nuclear and Subatomic Physics. *Preqs: PY 203 or 407; PY 412. 3(3-0) F.*

PY 508 Ion and Electron Physics. *Preq: PY 414. 3(3-0) F.*

PY 509 Plasma Physics. *Preq: PY 414. 3(3-0) F.*

PY 510 Nuclear Physics II. *Preq: PY 410. 4(3-2) S.*

PY (NE) 511 Nuclear Physics for Engineers. *Preq: PY 410. 3(3-0) F.*

PY 516 Physical Optics. *Preq: PY 415. 3(3-0) F.*

PY 517 Atomic and Molecular Physics. *Preqs: PY 401, 412. 3(3-0) S.*

PY 520 Measurements in Nuclear Physics. *Preq: PY 410. 3(2-2) S.*

PY 521 Statistical Physics I. *Preqs: PY 401, PY 413. 3(3-0) S.*

PY 543 Astrophysics. *Preqs: PY 203 or 407; PY 411. 3(3-0) S.*

PY (ECE) 552 Introduction to the Structure of Solids. *Preq: PY 401. 3(3-0) S.*

PY 553 Introduction to the Structure of Solids II. *Preq: PY 552 or equivalent. 3(3-0) F.*

PY (MA) 555 Mathematical Introduction to Celestial Mechanics. *Preq: MA 301. 3(3-0) F.*

PY (MA) 556 Orbital Mechanics. *Preqs: MA 301, 405, knowledge of elementary mechanics and computer programming. 3(3-0) S.*

PY 590 Special Topics in Physics. *Preq: Consent of department. Credits arranged. F,S.*

RELIGION

(Also see PHI—Philosophy.)

REL (FLH) 101 Elementary Biblical Hebrew I. *3(3-0) F.* The elements of grammar and syntax essential for a reading knowledge of Biblical Hebrew. Reading is drawn primarily from the Book of Genesis and some attention is given to exegetical method.

VANDERKAM

REL (FLH) 102 Elementary Biblical Hebrew II. *Preq: REL (FLH) 101. 3(3-0) S.* A continuation of REL (FLH) 101 with increased emphasis upon reading selected prose passages. VANDERKAM

REL (FLH) 201 Intermediate Biblical Hebrew I. *Preq: REL (FLH) 102. 3(3-0) F. Alt. yrs.* Continuing development of vocabulary and understanding of grammar and syntax through reading of selected prose and poetic passages in the Hebrew Bible. Exegetical matters are considered in connection with the readings. VANDERKAM

REL 298 Special Topics in Religion. *3(3-0) F,S.* Selected studies in religion that do not appear regularly in the curriculum. Topics will be announced for each semester in which the course is offered.

REL 300 Introduction to Religion. *3(3-0) F,S,Sum.* An analysis of various aspects of religion such as the development of the great traditions, as well as the relation of religion to personal maturity, cultural change, and the social good.

REL (SOC) 309 Religion and Society. *Preq: Three hours of sociology. 3(3-0) S,Sum.* (See Sociology.)

REL 311 Introduction to the Old Testament. *3(3-0) F,S,Sum.* The books of the Old Testament are studied by examining their content, background, and development. In order to highlight their distinctive traits and points of contact with their environment, these books are frequently compared with other Ancient Near Eastern literature. Generous use is also made of the contributions which archeology and literary studies have made toward clarifying the biblical text. VANDERKAM

REL 312 Introduction to the New Testament. *3(3-0) F,S,Sum.* Literary and historical study of the New Testament with attention to first-century Judaism (with the Dead Sea Scrolls) and religious movements in the Roman world. The focus is upon the gospels (their individual traits and relationships), early controversies with Judaism, and the emergence of church structure and teaching. ADLER

REL 317 Christianity. *3(3-0) F.* The development of Christianity from its origins to the present, noting the events, persons, ideas, beliefs, and practices which were most significant in this development. CUNNINGHAM

REL 318 Protestant Christianity. *3(3-0) S.* The distinctive characteristics of Protestant Christianity, primary theological emphases, major denominational forms, and cultural influences from the 16th century to the present.

REL 321 Religion in American Life. *3(3-0) F.* Representative people, movements, and thought in the major religions within the context of American society and culture. MULLIN

REL 323 Religious Sects in America. *3(3-0) S.* An investigation of various sects and minority faiths in America including Mormonism, Christian Science, Jehovah's Witnesses, and the holiness-charismatic movement. The course traces the origins, development, and teaching of these groups and places them within the context of American culture and religion. MULLIN

REL (HI) 324 American Religion After Darwin. *3(3-0) S.* An analysis of major religious issues from the Civil War to the mid-1920s. Topics include the relationship of science to religion, especially the impact of Darwin's evolutionary theory; biblical criticism; liberalism versus fundamentalism; the churches in an industrial society; the crusade against alcohol; the foreign missionary movement; and religious attitudes toward work, leisure, the family, and sex. MULLIN

REL 327 Contemporary Religious Thought. *3(3-0).* An examination of recent religious and theological thought in America and Europe as it has responded to the rapidly changing intellectual, scientific, and social dimensions of Western culture. CUNNINGHAM

REL 331 Hinduism and Islam. *3(3-0).* The religious traditions of Hinduism including early Vedic religion, Brahmanism, yogic disciplines, devotion cults, religio-philosophical systems, and modern religious movements; Islam, its origins in Arabia, and the major features of Muslim religiousness. STEWART

REL 332 Buddhism. 3(3-0) S. The beginnings of Buddhism in India and its expansion through the whole of Asia, the development of various forms such as Zen, Buddhist concepts, discipline of life, art and architecture, political involvements, and schools of thought. STEWART

REL 498 Special Topics in Religion. *Preq: Six hours REL. 1-6 F,S.* Detailed investigation of selected topics in religion. Topics determined by faculty members in consultation with head of the department. Course may be used for individualized study programs.

RECREATION RESOURCES ADMINISTRATION

RRA 101 Recreation Resources Orientation Laboratory. *Coreq: RRA 152. 1(0-3) F,S.* Introduction to the Department of Recreation Resources Administration, to the profession of park and recreation services, and to the career opportunities in the delivery of these services. LOVE

RRA 152 Introduction to Recreation. 3(3-0) F,S,Sum. Introduction to the professional field of recreation by presenting the basic principles, fundamentals and concepts of recreation as related to such factors as: recreation history and objectives, sociological and economic aspects of recreation, leadership qualities and facility provision; and settings for organized recreation in modern society. LOVE

RRA 200 Exploring Leisure Alternatives. 3(3-0) F,S,Sum. Leisure as a lifelong resource for human satisfaction and fulfillment; its potential for physical, mental, social and emotional growth and development of the individual. Leisure opportunity areas presented and evaluated. CULKIN

RRA 215 Maintenance and Operations I. *Preq: RRA 152. 3(3-0) F.* Methods of operation of various park and recreation facilities for public use; protection and law enforcement; job planning and scheduling; preventive maintenance; and modern maintenance techniques and maintenance materials. STERNLOFF, WARREN

RRA 216 Maintenance and Operations II. *Preq: RRA 152. 3(3-0) S.* Emphasis upon water-oriented recreation and public camping facilities; swimming pools; beaches; small lake management; marinas; day and family camping. STERNLOFF, WARREN

RRA 220 Commercial Recreation and Tourism. *Preq: RRA 152. 3(3-0).* Commercial recreation and the tourism industry; including its origin, present characteristics, behavioral foundations, and societal impacts. Emphasis on recreation administration in the commercial sector. PERDUE

RRA 241 Natural Resource Recreation. *Not open for RRA majors. 3(3-0) S.* The concepts and principles involved in identifying and describing natural resource components significant to recreation and management. The relationships between various governmental agencies and private enterprises in providing natural resource-based recreation opportunities are examined. Outdoor recreation policy is reviewed as it related to the management of natural resources.

RRA 320 Convention and Visitor Services. *Preq: RRA 152. 3(3-0) every third semester.* Programmatic issues of facilitating conventions, visitor services and special events, including convention operations, development and operation of visitor service programs, and special event programming. PERDUE

RRA 350 Outdoor Recreation Management. *Preq: RRA 341. 3(2-3) F.* Special problems of resource-based recreation management are studied. Special attention is given to developing an understanding of how agency philosophy and mission translate into managerial action. A management plan will be developed and an overnight weekend field trip is required.

RRA 353 Camp Administration. *Preq: RRA 152. 3(2-2) S.* Development of organized camping emphasis on the administration of resident camping programs. Educational and recreational objectives of camping. Program planning, leadership training, and administration of camps. Laboratory provides for application of camping principles. WARREN

RRA 358 The Recreation Program. *Preq: RRA 152. 4(2-4) F.* Types of recreation opportunities available to individuals, groups, neighborhoods or municipalities and the methods of providing these opportunities.
LOVE, WILSON

RRA 359 Leadership and Supervision in Recreation. *Preqs: RRA 215, RRA 216. 3(2-2) S.* Provides classroom instruction to develop awareness skills in leadership, group dynamics, human relations and employee supervision in the delivery of recreation services. Particular emphasis is placed upon the roles of the park or recreation supervisor.
CULKIN, KIRSCH

RRA 365 Arts Management in Recreation. *Preq: Junior standing. 3(2-2) F.* An introduction to arts management in recreation programs that stresses the importance of arts to the individual and community is presented. An understanding and appreciation of the role of the arts in the total recreation plan is developed. Emphasis is placed on arts management principles such as philosophy, fiscal, technical and community resources.
KIRSCH, WILSON

RRA 366 Administration of Recreation Sports Programs. *Preq: RRA 358. 3(3-0) S.* General concepts and desirable practices for the effective management of a community recreation sports program are studied. Also examined are the techniques required for the identification and solution of problems usually associated with community sports programs.
LOVE, REA

RRA 420 Resort Management and Operations. *Preq: RRA 152. 3(3-0) every third semester.* Theory and practical applications of planning, accommodations management, food and beverage operations, recreation programs, and management in the resort industry.
PERDUE

RRA 438 Recreation for Special Populations. *Preq: RRA 358. 3(3-0) F.* Leisure concerns of deprived groups. Status, problems and community service needs of special populations found in most American communities. Special populations include the physically disabled, the mentally retarded, the aging and the economically deprived.
STERNLOFF

RRA 442 Recreation and Park Interpretive Services. *Preq: Junior standing. 3(2-3) F.* *principles* The and practices of environmental and historical interpretation are studied. Both personal and non-personal interpretive communication techniques are critically examined. Also studied are comprehensive planning and implementation of interpretive programs, and equipment and facilities used in environmental and historical interpretation.
WILSON

RRA 443 Applied Recreation and Park Interpretive Services. *Preqs: RRA 442, Junior standing. 3(1-6) S.* Development, implementation and evaluation of interpretive communication techniques as applied to historic and natural resources.
WILSON

RRA 451 Principles of Recreation Planning and Facility Development. *Preq: RRA 358. 3(2-3) S.* Planning activities analyzed as decision making processes. Identification, interpretation, evaluation and utilization of data and resources necessary for recreation planning. Planning principles applied in the analysis of proposed and existing recreation sites.
REA

RRA 453 Administrative Policies and Procedures. *Preq: RRA 359. 3(3-0) F.* The internal organization of the recreation and park department; the administrative process; legislation and legal foundations; boards and commissions; personnel practices and policies; office management; public relations.
CULKIN

RRA 454 Recreation and Park Finance. *Preqs: Six hours RRA, sr. standing. 3(3-0) S.* Recreation and park fiscal administration; sources of finance for current and capital expenditures; revenue activities; financial planning; budgeting; expenditure policies; accounting; auditing and planning for recreation and park services.
KIRSCH

RRA 475 Recreation and Park Internship. *Preqs: RRA 359 and senior standing. 9(0-27) (9 weeks) F,S,Sum.* Provides prospective recreator with an opportunity for controlled experiences in skills and techniques involved in recreation and park department management. The student spends nine weeks off campus in a departmental selected location. **KIRSCH**

RRA 480 Recreation Analysis and Evaluation. *Preqs: ST 311, RRA 359. 3(2-2) F,S.* Examination of the steps involved in analyzing and estimating the impact of recreation and parks services. Includes relevant issues and useful approaches for systematic analysis. Emphasis is placed on an understanding and development of various types of systematic evaluation designs. Activities leading to the analysis and development of performance reports to assess and improve managerial operational efficiency are covered. **CULKIN, SIDERELIS**

RRA 491 Special Problems in Recreation. *Preq: Consent of department. Limited to accumulative 6 total of credit hours. 1-6 F,S.* Aims to develop critical analysis. Forms a basis for the organization of research projects, for the compilation and organization of material in a functional relationship and for the foundation of policies. Seminar procedure.

Selected 500-Level Courses Open To Advanced Undergraduates

RRA 500 Theories of Leisure and Recreation. *Preq: Nine hours of RRA courses. 3(3-0) F.*

RRA 501 Research Methods in Recreation. *Preqs: ST 311 and nine hours of RRA courses. 3(3-0) S.*

RRA (EB) 503 Economics of Recreation. *Preq: EB 301 or 401. 3(3-0) F.*

RRA 504 Recreation and Park Data Systems. *Preqs: CSC 200, ST 311; Coreq: RRA 453. 3(3-0) F.*

RRA 505 Quantitative Techniques for Recreation and Natural Resource Management. *Preqs: CSC 200, ST 311. 3(3-0) S.*

RRA 510 Theories of Sport and Fitness Program Management. *Preq: RRA 358. 3(3-0) F. every third semester.*

RRA 511 Foundations for Sport, Exercise and Fitness Program Management. *Preq: RRA 358. 3(3-0) Every third semester.*

RRA 512 Recreational Sports Management. *Preq: RRA 358. 3(3-0) Every third sem.*

RRA 591 Recreation Resources Problems. *Preq: Advanced undergrad. or grad. status. 1-4 F,S.*

SOCIOLOGY

(Also see ANT—Anthropology; SW—Social Work.)

SOC 202 Principles of Sociology. *3(3-0) F,S,Sum.* Introduction to sociology. Basic concepts include role, norm, solidarity, authority, and social class. Basic perspectives include conflict and consensus. Analyses of key processes and institutions including interaction, inequality, organization, socialization, and social change.

SOC 203 Current Social Problems. *3(3-0) F,S,Sum.* Definition and substance of social problems with emphasis on contemporary United States. Problems may include crime, race conflict, illness, family stress, inequality, poverty, housing, population, and social aspects of environmental crisis.

SOC 204 Sociology of Family. *3(3-0) F,S,Sum.* Contemporary American family structures and processes and their development. Focus on socialization, mate selection, marital adjustment and dissolution.

SOC 205 Work: Occupations and Professions. *3(3-0) F,S,Sum.* Focuses on worker experience of rewards, satisfaction, exploitation, and alienation. Examines occupations and work settings of industrial workers, professional workers, office workers, and executive workers. Recurrent themes include effects of technology and managerial control on worker experiences, changing job opportunities for women, and relationship of education to jobs.

SOC 220 Cultural Geography. *3(3-0) F,S.* Investigates the world's past and present cultural diversity by studying spatial patterns of population, language, religion, material and non-material culture, technology and livelihoods, communities and settlements, and political organization and interaction.

SOC 241 Sociology of Agriculture and Rural Society. *3(3-0) F,S.* Application of sociological concepts, methods, theories and styles of reasoning to major social problems facing rural America. Changing structure of agriculture; social impact of agricultural technology; rural community growth and decline; rural industrialization; rural poverty; natural resources and environmental issues in rural America.

SOC (ANT) 261 Technology in Society and Culture. *3(3-0) F,S.* Processes of social and cultural change with focus on role of technological innovation. Cross-cultural emphasis. Special attention to role of scientists and engineers in socio-cultural change. Social and cultural impact analysis of planned technological change. Topical case studies apply course concepts and principles.

SOC 281 Sociology of Medicine (Formerly SOC 313). *3(3-0) S.* Employs theory and empirical studies to understand the social etiology of disease health practices, practitioners, and institutions, and the special area of mental health. Studies historical as well as contemporary examples of social influences on, and effects of, health throughout the world, but especially in the United States.

SOC 301 Human Behavior. *Preq: SOC 202 or PSY 200. 3(3-0) F,S,Sum.* The development of personality as a consequence of social interactions and behavior of individuals in social contexts. Topics include processes of learning, socialization, social perception, organization, stability and change of attitudes, norms, norm-formation and conformity, social roles and role strain, interpersonal attraction, and intergroup and intragroup relations.

SOC 302 Mass Communications and Modern Society. *Preq: Three cr. in SOC. 3(3-0) S.* Sociology of mass communications: its processes, messages, audiences, communicators, and social effects. Classic works by social scientists studied for impact of mass communications on contemporary decision-making and life style.

SOC 304 Women and Men in Society. *Preq: Three cr. in SOC. 3(3-0) F,S.* Investigates perpetuation and change in female and male gender roles using sociological concepts, theories and research. Explores how gender role expectations are developed and transmitted. Employs historical and cross-cultural perspectives as comparative bases for studying causes and consequences of sex differentiation in contemporary society.

SOC 305 Racial and Ethnic Relations. *Preq: Three cr. in SOC. 3(3-0) F,S,Sum.* Study of the nature of the relationships among racial and ethnic groups in societies around the world but with emphasis on the United States. Explores topics such as inequalities of wealth, power, and status, racism, conflict, and social boundaries among groups. Current trends in intergroup relations are discussed.

SOC 306 Criminology. *Preq: Three cr. in SOC. 3(3-0) F,S,Sum.* The processes whereby behavior is defined as crime and persons are identified as criminals. Includes a sociological investigation of agencies of law enforcement, adjudication, correlations, and prevention; patterns of criminal behavior; explanations of variations in criminality with emphasis on sociocultural and sociopsychological theories.

SOC (REL) 309 Religion and Society. *Preq: Three hours of Soc. 3(3-0) S.* Examines the role of religion in the organization and operation of social systems. Particular emphasis is on the functions of belief networks and of their institutional expressions. Religious institutions are studied to understand their influence on other significant social systems such as political, educational, legal, economic, and family systems.

SOC 311 Community Relationships. *Preq: Three cr. in SOC. 3(3-0) F,S.* A survey of the institutions, organizations and agencies found in modern communities; social problems and conditions with which they deal; their interrelationship and the trend toward over-all planning.

SOC 342 Rural Societies Around the World. *Preq: SOC 202 or SOC 241. 3(3-0) S.* Sociological description, analysis and understanding of rural societies in Asia, Africa and Latin America and an overview of the process of socioeconomic development in these societies. Specific topics include sociological approaches to the study of development, land tenure, agrarian reform, the social and economic structures of peasant societies, and peasant revolt and revolution.

SOC 351 Population and Planning. *Preq: Three cr. in SOC. 3(3-0) F.* Effects of births, deaths and migration on population size, composition, and distribution. Socioeconomic and political implications of demographic change. Impact of alternative policies on demographic processes.

SOC 402 Urban Sociology. *Preq: SOC 202. 3(3-0) F,S.* Urban social structures emphasizing determinants and consequences of changes in urban places and life styles. Current urban problems and various approaches to urban social planning.

SOC 410 Sociology of Organizations. *Preq: SOC 202. 3(3-0) Alt. F.* Applications of sociological theories to study of organizational structures and processes. Special attention to formal and informal controls, structural change, conflict and cooperation, and organizational relations with environment. Extensive use of case studies and historical investigations.

SOC (PS) 413 Criminal Justice Field Work. *Preqs: SOC 306 and PS 311; senior standing in Criminal Justice option. 4(2-8) F,S.* Supervised observation and experience in a criminal justice agency. Study of relationships between ongoing programs and relevant political and sociological theory and research. Weekly seminars, small groups, and individual conferences. Presentation of an integrative report.

SOC 414 Social Class. *Preq: SOC 202. 3(3-0) F.* The universality of social inequality, its bases, and consequences. Relationship of social inequality to social class, life chances, life styles and social mobility. Theories and research methods pertinent to the study of social class.

SOC 415 Social Thought. *Preq: SOC 202. 3(3-0) F,S,Sum.* Discussion and analysis of social thought in its philosophical and social science, especially sociological, perspectives. Major sociological theories, their construction and evaluation, their application to specific substantive fields, and the relationship between theory and research.

SOC 416 Social Research Methods. *Preqs: Sr. standing or ST 311. 3(3-0) F,S,Sum.* Basic methods of social research: research design, sampling, data collection, measurement, and analysis; the relation of theory and research.

SOC 418 Sociology of Education. *Preq: SOC 202. 3(3-0) Alt. yrs.* Application of sociological theories to education, relating processes of stratification, socialization, and organization. Sociological analysis of classroom and learning. Connections of schooling with family, community, and work. Cross-cultural and U.S. research.

SOC 420 Sociology of Corrections. *Preqs: SOC 306 and PS 311. 3(3-0) S.* A variety of correctional settings studied in sociological perspective. Major topics: formal and informal organization; inmate social systems; correctional programs and their consequences; alternatives to confinement; special-purpose facilities. Focus on contemporary American prison systems with historical and cross-cultural comparisons.

SOC 425 Juvenile Delinquency. *Preq: SOC 202. 3(3-0) F,S,Sum.* Nature and extent of juvenile delinquency; measurement problems; and biogenic, psychogenic and sociogenic theories of delinquency causation. Policy implications of delinquency theories for treatment and prevention. Evaluation of treatment and prevention programs.

SOC 426 The Juvenile Justice System. *Preq: SOC 202, 3(3-0)* S. The development of the juvenile justice system; theory and practice of juvenile justice with emphasis on social control, social organization and social interaction; decision making and its consequences as demonstrated in enforcement, adjudication and corrections. Field trips to various juvenile justice agencies.

SOC 440 Social Change. *Preq: SOC 202, 3(3-0)* F. Examines sources, processes and consequences of social change on both the macro and micro levels. Employs classical and contemporary theories as well as empirical studies to elucidate historical and modern examples of social change in international, national, regional, community and institutional settings. Studies various methodologies appropriate to each level of analysis.

SOC 490 Senior Seminar in Sociology. *Preq: Sr. standing and consent of department.* 3(3-0) F,S. Affords an opportunity to synthesize knowledge, theory and methods learned in earlier courses to a depth study of a substantive or conceptual area.

SOC 495 Independent Field Work in Applied Sociology. *Preq: SOC 416; Coreq: SOC 410. Senior standing in Sociology. 3-6 F,S,Sum.* Supervised observation and experience in an applied setting. Student develops and demonstrates competency in his/her major area by applying sociological knowledge to organization/agency problems.

SOC 498 Special Topics in Sociology. *Preq: Six hours SOC above the 200 level. (1-6) F,S,Sum.* A detailed investigation of a topic in sociology. Topic and mode of study determined by the faculty member(s) in consultation with the department head.

Selected 500-Level Courses Open To Advanced Undergraduates

SOC 501 Leadership. *Preq: SOC 202 or equivalent. 3(3-0).*

SOC 502 Society, Culture and Personality. *Preq: SOC 202 or equivalent. 3(3-0).*

SOC 504 Education in Modern Society. *Preqs: SOC 202, 301 or equivalent. 3(3-0).*

SOC 505 Medical Sociology. *Preq: Six credits in SOC or grad. standing or PBS status. 3(3-0).*

SOC 507 Social Movements. *Preq: SOC 503 or 6 hours of SOC or social psychology. 3(3-0).*

SOC 509 Population Problems. *Preq: SOC 202 or equivalent. 3(3-0).*

SOC 510 Industrial Sociology. *Preq: SOC 202 or equivalent. 3(3-0).*

SOC 512 Family Analysis. *Preq: SOC 202 or equivalent. 3(3-0).*

SOC 513 Community Organization and Development. *Preq: SOC 202 or equivalent. 3(3-0).*

SOC 514 Developing Societies. *Preq: Six hours SOC or ANT or grad. standing or PBS status. 3(3-0).*

SOC 515 Deviant Behavior. *Preq: Six hours SOC or ANT or grad. standing or PBS status. 3(3-0).*

SOC 516 Social Control. *Preq: Six hours SOC above 200 level or grad. standing or PBS status. 3(3-0).*

SOC (PS) 517 The Police Bureaucracy in a Democratic Society. *Preq: Advanced undergrad. standing including 12 hours of political science, grad. standing or PBS status. 3(3-0) S.*

SOC 520 Sociology of Religion. *Preq: SOC 202 or equivalent or grad. standing or PBS status. 3(3-0).*

SOC 523 Sociological Analysis of Agricultural Development. *Preq: Six hours SOC or grad. standing. 3(3-0).*

SOC 534 Sociology of U.S. Agriculture. *Preqs: Six hours SOC, or grad. standing. 3(3-0).*

SOC 541 Social Systems and Planned Change. *Preq: Three hours SOC. 3(3-0).*

SOC 555 Social Stratification. *Preq: Six hours SOC. 3(3-0).*

- SOC 560 Racial and Cultural Contacts.** *Preq: Six hours SOC or CI. 3(3-0).*
- SOC 565 Sociology and General Systems Theory.** *Preqs: Six hours SOC, one ST course. 3(3-0).*
- SOC 570 Commitment.** *Preq: Six hours SOC. 3(3-0).*
- SOC (EB) 574 The Economics of Population.** *Preq: EB 301 or 401. 3(3-0) S.*
- SOC 590 Applied Research.** *Preq: SOC 202 or equivalent. 3(3-0).*
- SOC 591 Special Topics in Sociology.** *Preq: CI. 1-6.*

SPEECH-COMMUNICATION

SP 100 Foundations of Communication Theory. *3(3-0) F,S,Sum.* Surveys communication theories in: public communication, interpersonal and organizational communication, theatre, telecommunication, and speech science and disorders. Demonstrates ways in which various areas in Speech-Communication are interrelated.

SP 101 Speech Improvement. *Not accepted for area emphasis requirement in Public Communication. 3(3-0) F,S.* Basic processes of speech production. Attention to the student's voice quality, articulation, pronunciation, and general vocal expression. Speech improvement; help in recognition and reduction of excessive regional dialect.

FRANKLIN, PARKER

SP 103 Introduction to the Theatre. *3(3-0) F,S.* Introduces students to artistic, technical, historical, and literary areas of theatre. Work in acting, directing, design, stagecraft, lighting, costuming, make-up, theatre history reading and evaluating plays.

CAPLE, RUSSELL

SP 110 Public Speaking. *3(3-0) F,S,Sum.* Basic elements of oral communication. Emphasis on research skills, topic selection, speech organization, skills in speech delivery, and active listening for analysis and evaluation of speeches. Requires a minimum of four graded speeches in class.

SP 112 Interpersonal Communication. *3(3-0) F,S,Sum.* Interpersonal communication competence: self-concept, self-disclosure, active listening, verbal and nonverbal communication, conflict management, and communication change.

ANDERSON, LEONARD, MUNN

SP 146 Business and Professional Communication. *3(3-0) F,S.* The nature of communication theory and practice in business and professional settings. Development of individual, dyadic, group and organizational communication proficiencies. Supervisory/subordinate and peer communication, active listening, group communication, and presentational speaking.

SP 200 Introduction to Communication Inquiry. *Preq: SP 100. 3(3-0) F,S,Sum.* Acquaints speech-communication majors with basic methods and procedures for communication inquiry and the reporting of communication research. Topics include how and why communication scholars ask questions, kinds of approaches to answering questions, and opportunities for utilizing research facilities. Emphasis is given to proper organization and style for writing research papers in communication.

FUNKHOUSER, SCHRAG

SP 201 Theories of Persuasive Communication. *3(3-0) F,S.* Studies ways in which communication influences attitudes and behavior. Examines interaction of speakers, audiences, topics, messages, and occasions as they affect construction and reception of persuasive messages.

CAMP, PARKER, RODGERS

SP 202 Group Communication. *3(3-0) F,S.* Group communication in business, industry, government, and education. Elements of decision-making, leadership, managing conflict, and facilitating productive membership.

MUNN

SP 203 Theory and Practice of Acting. 3(3-0) F,S. Introduction to certain contemporary theories on acting and their practical application through classroom participation. Attention is given to role analysis, adaptation of the voice and body to performance demands, and role development through various rehearsal activities.

CAPLE, RUSSELL

SP 204 Writing for the Electronic Media. 3(3-0) F. Theory and practice of writing for radio, television and film. Students develop scripts, treatments and storyboards. Areas of study include instructional, dramatic, promotional, and documentary approaches.

ALCHEDIAK, SCHRAG

SP 211 Argumentation and Advocacy. 3(3-0) F,S. A study of the process of influencing opinion through the use of logical arguments. Emphasis upon analysis, briefing, evidence, reasoning, and refutation. In-class debating.

CAMP, RODGERS

SP 212 Interracial Communication. *Preq: CI.* 3(3-0) S. Focuses on human communication in interracial contexts. Stresses self awareness of racial attitudes and behaviors. Involves individual and group exercises and presentations. Requires one intensive weekend session.

SP 213 Oral Interpretation of Literature. *Preq: SP 110.* 3(3-0) S. Develops skills in selection, preparation, and oral presentation of prose, drama, and poetry.

FRANKLIN, SNOW, RUSSELL

SP 214 Introduction to Audio Production. *Preference is given to Speech-Communication majors.* 3(1-4) F. Basic principles of audio production, including studio operation, performing, writing, and producing.

ALCHEDIAK, FUNKHOUSER

SP 215 Introduction To Speech Disorders. 3(3-0) F. A study of the development of normal speech and hearing. Common speech and hearing defects; basic techniques for their prevention and treatment.

DeJOY

SP 223 Stagecraft. 3(3-0) F,S. Introduction to the fundamentals of scenery design and set construction and practical applications with the use of design media and shop facilities. Participation in production activity for University Theatre presentations is required.

SP 224 Introduction to Television Production. *Preference is given to Speech-Communication majors.* 3(1-4) F. Principles of education and commercial television. Examines role of television in society. Emphasis on producing, directing, and programming.

ALCHEDIAK, FUNKHOUSER

SP 226 Introduction to Public Relations. 3(3-0) F,S. Public relations as a communication function of organizations. Public relations process, principles, history, and practice. Analysis of environmental, organizational, communication, and audience influences on public relations practice; career opportunities.

LONG

SP 233 Introduction to Stage Lighting. 3(2-2) F. Introduces students to the fundamentals and uses of stage lighting equipment and stage lighting design. Provides for practical application of design media and shop facilities. Requires participation in production activity for University Theatre presentations.

SP 234 Criticism of Entertainment Media. 3(3-0) F. Examines the history and impact of media entertainment programming. Television is the central focus but film, radio and print are included. Provides awareness of the evolution of contemporary entertainments and skills of isolating and assessing impact.

SCHRAG

SP 244 Introduction to Film Production. 3(2-2) F. Principles of production and editing techniques for 8mm and 16mm film including film stocks, cinematography, camera and lens operation, editing and splicing, the laboratory, scripting, and the film business. Students will script, shoot, and edit short films.

ALCHEDIAK

SP 298 Special Projects in Speech-Communication. 1-3 F,S. A special projects course to be utilized for guided research or experimental classes at the sophomore level, topic determined by instructor.

SP 301 Advanced Public Speaking. *Preqs: SP 110, SP 201. 3(3-0) F,S,Sum.* An advanced study of public speaking. Emphasis upon mature application of theories of informative and persuasive oral discourse. Also covers ceremonial speaking. Critical analysis of student speeches by instructor and by class. Critical self-analysis by the student.

CAMP, PARKER, RODGERS

SP 302 Managing Meetings. *3(3-0) F.* Rules and customs of meetings in committees, assemblies and organizations; meeting management and group leadership; parliamentary motions and strategies.

CAMP

SP 303 Stage Directing. *3(3-0) F,S.* Basic theory of directing and its application to theatrical production. Includes play reading, evaluation, casting procedure, staff organization, and rehearsal planning and practices.

CAPLE, RUSSELL

SP 304 Survey of Telecommunication. *3(3-0) F.* Examination of historical, legal, economic, and social aspects of telecommunication.

FUNKHOUSER

SP 312 Patterns of Miscommunication. *3(3-0) F,S.* An examination of miscommunication patterns originating from fallacious semantic assumptions held by communicators. Suggestions for preventing miscommunication.

MUNN

SP 313 Advanced Oral Interpretation. *Preq: SP 213. 3(1-4) S. Alt. yrs.* Increases skills in selection, preparation, and oral presentation of literature for specific audiences of local elementary and/or secondary school pupils.

SNOW

SP 314 Advanced Audio Production. *Preq: SP 214; Preference given to Speech-Communication majors. 3(1-4) S.* Advanced multichannel audio production techniques, including performing, writing and producing. Studio acoustics, audio signal processing and advanced microphone techniques.

ALCHEDIAK, FUNKHOUSER, SCHRAG

SP 315 Phonetics. *3(3-0) F,S.* A study of the anatomy and movements of vocal organs, correct pronunciation; speech sounds; standards of American pronunciation; application of the International Phonetic Alphabet, with vocal and ear training

FRANKLIN, PARKER

SP 321 Survey of Rhetorical Theory. *Preq: SP 110. 3(3-0) F. Alt. Yrs.* Examines the development of rhetorical theory from classical to modern periods. Emphasis key concepts of rhetoric and their changes.

CAMP, PARKER, RODGERS

SP 322 Nonverbal Communication. *Preq: SP 112. 3(3-0) F,S, Sum.* A comprehensive study of theory and research in nonverbal communication, including: environment; space; physical appearance; movement; eyes and facial expressions; and vocal cues. Students will design and carry out individual and group research.

ANDERSON, LEONARD

SP 323 Introduction to Scenic Design. *Preq: SP 223. 3(2-2) S.* Introduces aesthetics of scenic design, elements and principles of design, theories and applications to the physical stage in relation to the script. Provides practical applications with the use of design media in University Theatre productions.

JANNEY

SP 324 Advanced Television Production. *Preq: SP 224. 3(1-4) S.* Television program production, including script writing, directing, staging, editing and the artistic/commercial aspects of television. Individual student projects include production of several videotapes for use on educational and commercial stations.

ALCHEDIAK, FUNKHOUSER

SP 325 Anatomy and Physiology of Speech. *Preq: SP 215; Coreq: SP 315. 3(3-0) F.* Anatomy and Physiology of the speech mechanism with emphasis on respiration, phonation, resonance, articulation and the physical and acoustical aspects of the speech process.

DeJOY

SP 326 Public Relations Applications. *Preq: SP 226. 3(3-0) F,S.* Management of the public relations function in organizations and public relations counseling; communication theory and nature of materials emanating from public relations departments and counseling firms; practical analysis and development of public relations publicity and campaigns.

FUNKHOUSER, LONG

SP 332 Relational Communication. *Preq: SP 112. 3(3-0) F,S.* A study of communication patterns in the development and deterioration of interpersonal relationships. Students will relate the theories to their own interpersonal relationships. Students will be involved in individual and group research and presentations. **ANDERSON, LEONARD**

SP 334 Criticism of Information Media. *Preq: SP 234 or junior standing. 3(3-0) S.* History and impact of informational and persuasive telemediated messages. Topics addressed include credibility and motivation in local and national news media, persuasion in political campaigns and social movements, art and artifice in commercials, the infusion of entertainment elements into informational programs. **SCHRAG**

SP 335 Speech and Language Development. *Preq: SP 215. 3(3-0) F. Alt. yrs.* Theories of language development including prelinguistic, phonological, morphological development and acquisition of syntax. Behavioral development during infancy and early childhood. Course includes observations of normal children in a day care setting. **DeJOY**

SP 342 Interviewing. *Preq: Junior standing. 3(3-0) F,S.* Theory and practice of effective communication skills applied in various types of professional interviews. In-class interviewing. **MUNN**

SP 344 History of Cinema: Production and Direction. *Preq: Junior standing. 3(3-0) F.* Technological developments and aesthetic movements that have shaped cinema production and direction from the beginning of the industry to the present time. Evolution in camera movement, editing, sound, storyline, and the documentary. The Hollywood film industry and the influence of foreign filmmakers. **ALCHEDIAK**

SP 345 Delayed Speech and Language Development. *Preq: SP 335. 3(2-2) S.* Study of delayed speech and language development. Focuses on: mental retardation; central nervous system and emotional disorders; hearing loss; speech deprivation; voice; stuttering; and articulation. Requires field observation. **DeJOY**

SP 354 Portable Video Production. *Preference given to Speech-Communication Majors. 3(2-2) F,S.* Introduction to principles of field production (EFP) of video taped programs. Students will gain experience in using specialized equipment (ENG) required for portable production activities. Emphasis is placed on pre-production procedures, such as scripting, equipment selection, and organizing. Post-production activities feature editing and/or assembling the finished production. **ALCHEDIAK, FUNKHOUSER**

SP 355 Clinical Observation in Speech-Language Pathologies. *Preq: SP 215; Coreq: SP 315 or SP 325. 3(2-3) F,S.* Observation of a variety of therapy techniques and clinical procedures used in the treatment of speech-, language-, and hearing-impaired individuals in the NCSU Speech Clinic and other local internship sites. Several different observation systems will be employed, and observations will be recorded by students on micro-computers. **SCHUMACHER, DeJOY**

SP 356 Organizational Communication. *3(3-0) F,S,Sum.* Role of human communication in organizations, the assumptions inherent in management philosophies about effective communication, and an investigation of the relationships among communication, job satisfaction, productivity, development, and employee motivation. **LONG**

SP 390 Seminar in Speech-Communication. *Preq: 15 hours of SP courses, including SP 200; Speech-Communication majors only. 1(1-0) F,S.* Examination of postgraduate plans for employment or graduate school. Development of coursework and internship plans for senior year.

SP 404 Advanced Studies in Telecommunication. *Preq: SP 304. 3(3-0) S.* Case studies of issues related to the structure, control and social effects of the telecommunication industry in the United States. **FUNKHOUSER, SCHRAG**

SP 411 Rhetorical Criticism. *Preq: SP 321. 3(3-0) F.* An investigation of various approaches to the rhetorical analysis of public discourse, including Neo-Aristotelian criticism, movement studies, genre criticism, dramatistic analysis, content analysis, fantasy

theme analysis, and others. Students will present original critical studies of public communication phenomena such as public speeches, social movements, political campaigns, popular music, advertising and religious communication. CAMP, RODGERS

SP 421 Communication Law. *Preq: Junior standing. 3(3-0) S.* Explores the historical, philosophical, and legal foundations of communication rights and responsibilities. Philosophies and regulations affecting sources, messages, channels, receivers, and situations provide the central focus of the course. RODGERS

SP 431 Communication in the Political Campaign. *Preq: SP 110. 3(3-0) F. Alt. yrs.* Examines the critical, situational, and managerial aspects of communication in the contemporary political campaign. CAMP, RODGERS

SP 446 Problems in Public Relations. *Preq: SP 226. 3(3-0) F,S.* Theoretic and pragmatic analysis of case studies in public relations practice; current theoretic, cultural, moral, ethical, legal, and pragmatic issues in practice and research. LONG

SP 454 Portable Video Practicum. *Preq: SP 354. 3(0-6) S.* Hands-on experience in small video-systems production. Students produce instructional videotapes. Provides practical experience in all phases of the production process, including pre-production planning, post-production organization, and critical analysis of the final product. ALCHEDIAK

SP 455 Clinical Practicum in Speech-Language Pathologies. *Preq: SP 355. 3(2-2) F,S.* Applies theoretical principles through actual treatment of speech, language, and hearing impaired individuals. Licensed Speech-Language Pathologists on staff in the NCSU Speech Clinic supervise treatment provided by students. DeJOY, ELLEMAN

SP 465 Advanced Clinical Practicum in Speech-Language Pathologies. *Preq: A grade of C or better in SP 455, SP 335, SP 345, SP 425. 3(2-2) F,S.* Applies theoretical knowledge with practical application for speech, language and hearing impaired individuals. Appraisal and treatment provided by students is under the direct supervision of licensed Speech-Language Pathologists on staff in the NCSU Speech Clinic. DeJOY

SP 498 Special Topics in Speech-Communication. *Preq: Nine hours of speech, junior standing and permission of the department. 1-3 F,S.* A detailed investigation of a special topic in the communication arts or sciences.

SOIL SCIENCE

SSC 200 Soil Science. *Preqs: CH 103 or 107. 4(3-3) F,S.* Fundamentals of soils including origin, composition and classification; their physical, chemical, and biological properties; significance of these properties to soil-plant relationships and soil management.

SSC (BAE) 321 Water Management. *Preq: Junior standing. 4(3-3) F.* (See Biological and Agricultural Engineering.)

SSC 341 Soil Fertility and Fertilizers. *Preqs: SSC 200, BS 100. 3(3-0) F.* Principles of managing plant nutrition for crop production; fertilizer materials, crop fertilization, soil fertility maintenance, and management practices for optimizing fertilizer use; soil and plant tissue testing as diagnostic tools in nutrient management. MINER

SSC 342 Soil Fertility Laboratory. *Coreq: SSC 341. 1(0-3) F.* Growing plants in solution and soil. Relating nutrient requirements to soil test data determined in lab. Calculating quantities of lime and fertilizer needed and computing least cost blends. Field trips for soil sampling and visiting soil testing lab and bulk blending plants. COX

SSC 361 Non-Agricultural Land Use and Management. *Preq: SSC 200. 3(2-3) S. Alt. yrs.* History of land use; competition among uses of land for food and fiber production, living space, and open space; engineering properties; land treatment of wastes; erosion and sedimentation control; land use in coastal areas; development of land use plan. KING

SSC (PM) 370 Alternative Agricultural Systems. *Preq: SSC 200. 3(3-0) S. Alt. yrs.* Principles and methodologies of alternative agricultural systems (e.g. organic, biodynamic, biological, ecological, permaculture) as related to soil productivity and management, nutrient sources, energy, economics, pest management, pollution and current research. Explore the feasibility of alternative systems or combinations of alternative and conventional systems as viable methods for food and fiber production. KING

SSC 452 Soil Classification. *Preq: SSC 200. 4(2-5) S.* Genesis, morphology, and classification of soils; characterization of soils according to their diagnostic properties; interpreting soil use potential; emphasis on North Carolina soils and their taxonomy; field exercise in soil mapping and site evaluation; several field trips, one overnight. KLEISS

SSC 461 Soil Physical Properties and Plant Growth. *Preq: SSC 200 or equivalent. 3(3-0) F.* Soil physical properties and their influence upon plant growth; soil solid-porosity relationships, soil water, soil temperature, soil aeration and mechanical impedance. Principles associated with management and alteration of physical properties. CASSEL

SSC (CS) 462 Soil-Crop Management Systems. *Preqs: CS 211, CS 414, SSC 341, SSC 342, SSC 452; senior standing. 3(2-3) S.* Unites principles of soil science and crop science with those of allied areas into realistic agronomic applications; practical field studies in planning and evaluation of soil and crop management systems. FIKE, KAMPRATH

SSC 472 Forest Soils. *Preq: SSC 341, or FOR 303. 3(2-3) S.* Soil as a medium for tree growth; relation of soil physical, chemical, and biological factors to the practice of silviculture; extensive soil management in the forest and intensive soil management in forest nurseries and in seed orchards; relation of soil and site to forest genetics, ecology, pathology, and entomology. DAVEY

SSC 490 Special Topics in Soil Science. *Preq: SSC 200. 1-6 F, S.* Special topics, problems, trial courses, or activities in various phases of soil science.

SSC 492 Senior Seminar in Soil Science. *Preq: Senior standing in School of ALS. 1(1-0) S.* Oral presentations by students on current topics in soil science; informal discussion of current topics among students and faculty.

Selected 500-Level Courses Open To Advanced Undergraduates

SSC 501 Tropical Soils: Characteristics and Management. *Preq: Six credits in SSC. 3(3-0) S. Alt. yrs.*

SSC 511 Soil Physics. *Preqs: SSC 200, PY 212. 4(3-3) F.*

SSC 520 Soil and Plant Analysis. *Preqs: PY 212; CH 315; at least three soils courses including SSC 341 or CI. 3(2-3) Alt. S.*

SSC 522 Soil Chemistry. *Preqs: SSC 200, one year of general inorganic chemistry. 3(3-0) S.*

SSC 532 Soil Microbiology. *Preqs: MB 401; CH 220 or CI. 4(3-3) S.*

SSC 541 Soil Fertility. *Preq: SSC 341. 3(3-0) F.*

SSC 551 Soil Morphology, Genesis and Classification. *Preqs: MEA 120, SSC 200, SSC 341. 3(3-0) F.*

SSC 553 Soil Mineralogy. *Preqs: SSC 200, SSC 341, MEA 330. 3(2-3) F.*

SSC 560 Advanced Soil Management. *Preqs: SSC 200, 341. 3(3-0) Alt. Sum.*

SSC 590 Special Problems. *Preq: SSC 200. Credit Arranged. F,S.*

STATISTICS

ST 101 Statistics by Example. *Preq: Credit not allowed if student has prior credit for another ST course. 3(3-0) F.* Introduces a broad range of statistical topics by the use of examples drawn from the social, physical and life sciences, the humanities, and sports. Tables and graphs, elementary probability, frequency distributions, estimation, hypothesis testing, sampling, prediction, modeling. DIETZ

ST (PSY) 240 Introduction to Behavioral Research I. *Preq: PSY 200; Coreq: PSY (ST) 241. For PSY and HRD majors only. 3(3-0) F.* (See Psychology).

ST (PSY) 241 Introduction to Behavioral Research I Lab. *Preq: PSY 200; Coreq: PSY (ST) 240. For PSY and HRD majors only. 2(0-4) F.* (See Psychology).

ST (PSY) 242 Introduction to Behavioral Research II. *Preqs: PSY (ST) 240, 241; Coreq: PSY (ST) 243. For PSY and HRD majors only. 3(3-0) S.* (See Psychology).

ST (PSY) 243 Introduction to Behavioral Research II Lab. *Preqs: PSY (ST) 240, 241; Coreq: PSY (ST) 242. For PSY and HRD majors only. 1(0-2) S.* (See Psychology).

ST 301 Statistical Methods I. *Preqs: MA 102; CSC 101 or CSC 111. 3(3-0) F.* An introduction to the principles and practices of collecting and analyzing data. Techniques for drawing appropriate samples; summarizing data; estimating means, variances, regression coefficients, and correlations; measures of association; and tests of hypotheses. The use of computer and statistical packages for data storage, retrieval and simple analyses.

ST 302 Statistical Methods II. *Preq: ST 301. 3(3-0) S.* Methods and practices of applied statistics, including multiple and non-linear regression, analysis of variance and multivariate analysis. The use of statistical packages on the computer will be emphasized. Exercises aimed at developing mastery of matrix manipulating packages as tools to obtain desired analyses will be included.

ST 311 Introduction to Statistics. *3(3-0) F,S,Sum.* Quantitative descriptions of populations; sampling ideas in experiments and surveys; making inferences from samples; measuring and coping with uncertainties inherent in statistical inference. STINES

ST 312 Forest Biometry. *Preq: FOR 272 or ST 311; Coreq: FOR 273. 3(3-0) S.* Principles of information analysis and reporting for decision making in resource management. Applications of inference techniques to resource inventory, growth and yield estimation, site indexing, and timber stand characteristics. HAFLEY

ST (EB) 350 Economics and Business Statistics. *Preqs: MA 114; EB 201 or 212. 3(3-0) F,S,Sum.* (See Economics and Business.)

ST 361 Introduction to Statistics for Engineers. *Preq: College algebra. 3(3-0) F,S,Sum.* Statistical techniques useful to engineers and physical scientists. Includes elementary probability, frequency distributions, sampling variation, estimation of means and standard deviations, confidence intervals, significance tests, elementary least squares curve fitting.

ST 371 Introduction to Probability and Distribution Theory. *Preq: MA 201; Coreq: MA 202. 3(3-0) F,S,Sum.* Basic concepts of probability and distribution theory for students in the physical sciences, computer science and engineering. Provides the background necessary to begin study of statistical estimation, inference, regression analysis, and analysis of variance.

ST 372 Introduction to Statistical Inference and Regression. *Preq: ST 371. 3(3-0) F,S,Sum.* Statistical inference and regression analysis including theory and applications. Point and interval estimation of population parameters. Hypothesis testing including use of t , χ^2 and F . Simple linear regression and correlation. Introduction to multiple regression and one-way analysis of variance.

ST 401 Basic Statistical Analysis I. *Preq: ST 302 or ST 372. 3(3-0) F.* Basic concepts, random variables, distributions, statistical measures, estimation, tests of hypotheses, the analysis of variance, elementary design, multiple comparisons, full rank regression. Primarily for Statistics majors and minors.

ST 402 Basic Statistical Analysis II. *Preq: ST 401. 3(3-0) S.* Full rank multiple regression, factorial experiments, split-plot designs, covariance, disproportionate subclass number analysis, analysis of discrete data, nonparametric statistics. Primarily for Statistics majors and minors.

ST 421 Introduction to Mathematical Statistics I. *Preq: MA 202 or 212. 3(3-0) F.* Elementary mathematical statistics primarily for undergraduate majors and graduate minors in Statistics. Introduction to probability, common theoretical distributions, moments, moment generating functions, sampling distributions, central limit theorem.

ST 422 Introduction to Mathematical Statistics II. *Preq: ST 421. 3(3-0) S.* Elementary mathematical statistics primarily for undergraduate majors and graduate minors in Statistics. Point and interval estimation, maximum likelihood, tests of hypotheses, concepts of decision theory and elements of general linear model theory.

ST 431 Industrial Statistics. *Preq: ST 372 or ST 422. 3(3-0) S.* Experimental design and control principles useful in industrial situations. Topics include: blocking; fractional and response surface design procedures; quality control graphing and estimation procedures for industrial process control; reliability estimation procedures. Computer applications stressed.

ST 432 Introduction to Survey Sampling. *Preq: ST 302 or 401. 3(3-0) F.* Design principles pertaining to planning and execution of a sample survey. Simple random, stratified random, systematic, and one- and two-stage cluster sampling designs. Emphasis on statistical considerations in analysis of sample survey data. Class project on design and execution of an actual sample survey.

ST 493 Special Topics in Statistics. *Preq: CI. 1-3 F,S,Sum.* Directed readings, problem sets, written and oral reports as indicated by need and interest of student.

Selected 500-Level Courses Open To Advanced Undergraduates

ST 505 Applied Nonparametric Statistics. *Preq: ST 372 or ST 511. 3(3-0) S.*

ST 507 Statistics for the Behavioral Sciences I. *3(3-0) F.*

ST 508 Statistics for the Behavioral Sciences II. *Preq: ST 507 or CI. 3(3-0) S.*

ST 511 Experimental Statistics for Biological Sciences I. *Preq: ST 311 or grad. standing. 3(3-0) F,S.*

ST 512 Experimental Statistics for Biological Sciences II. *Preq: ST 511 or equivalent. 3(3-0) F,S.*

ST 514 Experimental Statistics for Social Sciences II. *Preq: ST 513 or equivalent. 3(3-0) S.*

ST 515, 516 Experimental Statistics for Engineers. *Preq: (515) ST 361 or grad. standing; (516) ST 515 or equivalent. 3(3-0) F,S.*

ST 517 Applied Least Squares. *Preq: ST 402 or equivalent. 3(3-0) F.*

ST 521 Statistical Theory I. *Coreqs: MA 425 or MA 511 and MA 405. 3(2-2) F.*

ST 522 Statistical Theory II. *Preq: ST 521; Coreq: MA 426 or MA 512. 3(2-2) S.*

ST 531 Design of Experiments. *Preq: ST 402 or equivalent. 3(3-0) F.*

ST (MA) 541 Theory of Probability I. *Preq: MA 425 or 511. 3(3-0) F.*

ST (MA) 542 Introduction to Stochastic Processes. *Preqs: MA 405 and MA 541 or ST 521. 3(3-0) S.*

ST (BMA, MA) 571 Biomathematics I. *Preq: Advanced calculus, reasonable background in biology or CI. 3(3-0) F.*

ST 591 Special Problems. *Preq: CI. 1-3 F,S,Sum.*

SOCIAL WORK

(Also see SOC—Sociology; ANT—Anthropology.)

SW 201 Community Social Services. *3(3-0) F.* Study of social services typical of American communities including services to children, families, and older persons; and services in mental health, criminal and juvenile justice, and industry. Volunteer work optional.

SW 203 The Development of Social Welfare in the U.S.: Policy and Programs I. *3(3-0) F,S.* Major programs and policy developments in U.S. social welfare from the colonial period through the depression of the 1930's. Emphasis is upon definition of social problems and the characteristics of social programs.

SW 205 Social Welfare in Contemporary America: Policy and Programs II. *Preq: SW 203. 3(3-0) F,S,Sum.* Social welfare policy and programs from the 1930's to the present. Social security, employment programs, public assistance, the War on Poverty, reform efforts of the 1970's and developments in the 1980's.

SW 307 Economic Security Programs. *Preq: SW 205. 3(3-0) F,S.* Major economic security programs and their impact on the populations they serve. Analysis and evaluation of the benefit structure of social insurance and public assistance programs and proposals and attempts to reform these programs.

SW 309 Social Work in Schools. *Preq: SW 308. 3(3-0) F,Sum.* Practice models and roles relevant to school social work. Emphasis on cooperative work with school personnel in the identification, prevention and treatment of social, emotional and behavioral problems of children and interventive techniques with parents and community groups. Designed for individuals preparing for social work practice in the public schools and for school social workers working toward recertification.

SW 310 Human Behavior Theory for Social Work Practice. *Preq: SOC 202. 3(3-0) F,S,Sum.* Theory regarding human social functioning for students intending to practice social work. Emphasis on social, biological, psychological, and cultural factors in human life.

SW 312 Social Work Practice in Health Care. *For Social Work students. 3(3-0) F,S,Sum.* Focus on essential practice skills and knowledge required of social workers in health care systems. Study of multi-disciplinary team work in health care. An examination of the social components of major illnesses and disabilities, including prevention and rehabilitation. Discussion of emotional, cultural, economic and social factors in health and illness. Identification of health needs of specific population groups.

SW 314 Child Welfare. *Preq: SW 308. 3(3-0) S.* Focuses on social work practice with children, youth, their parents and substitute parents. Emphasizes development of diagnostic and case planning activities which support, augment or substitute for the family. Includes methods of protective services which focus on the maintenance, improvement and/or restoration of the social functioning of parents and children.

SW 320 Social Work Practice I. *Preq: SW 310. 3(3-0) F, S.* Elements of the general method of social work practice: professional values, client-worker relationships, and professional roles. Interviewing skills and problem analysis.

SW 405 Social Work Practice II. *Preq: SW 320. 3(3-0) F,S.* Problem-solving in social work practice with individuals and groups, including family and community groups.

SW 406 Field Work in Social Services I. *Preq: SW 320; Coreq: SW 405. This course may be repeated only once. 6(2-16) F,Sum.* Supervised placement in a social service organization. Application of social work knowledge and skill. Weekly seminar on campus.

SW 407 Field Work in Social Services II. *Preq: SW 406. This course may be repeated only once. 6(2-16) S,Sum.* Advanced supervised work in social service organization. Weekly seminar on campus.

SW 420 The Legal Aspects of Social Work. *Preq: SW 307. Social Work students only. 3(3-0) F,S.* This course explores the roles of the social worker in the legal field. Legal terms and procedures and the state and federal courts systems are studied. The legal aspects of protective services for children and adults, the child support laws and the juvenile justice system are examined. Students receive experience in locating and using legal records.

SW 498 Special Topics in Social Work. *Preq: Nine hours of Social Work. Bachelor of Social Work students. 1-6 F,S,Sum.* Independent or small group study of a social work practice or social welfare area. The number of credit hours determined by instructor and student.

TEXTILES

T 105 Introduction to Textile Material Science. *3(2-2) F,S.* Special properties of fibers and their classification, structures of yarns and fabrics, surface treatments of fabric, end products, market and management factors. Exercises and tutorial/problem sessions. A field trip will be required.

T 200 Introduction to Textiles. *Not open to students required to take T 105. 3(3-0) S.* Survey of textiles including technical and economic history of the industry; physical and chemical processes involved in producing textile products from raw materials; unique aesthetic, physical and chemical properties of textiles and how these properties are determined by raw materials and production processes; and influence of properties of textile materials on their utilization and performance.

T 203 Introduction to Polymer Chemistry. *Preq: CH 101. 3(3-0) F,S,Sum.* The organic reactions and principles necessary to understand the preparation properties and chemistry of polymers are surveyed; the synthesis, applications and behavior of the common classes of polymers are discussed with emphasis on those materials used in the textile industry; the chemistry and structure of natural and man-made fibers are given special attention.

T 211 Introduction to Fiber Science. *Preq: T 105; MA 112 or 102. 3(2-2) F,S,Sum.* Physical properties of fibers related to type and chemical structure. Includes parameters used to describe textile fibers, classification in terms of quality factors, their reactions to moisture, stress-strain properties, methods of measuring physical properties and relationship between polymer structure, fiber properties, and their utilization as single fiber composites or blends of fibers.

T 220 Yarn Production Systems. *Preq: MA 111, T 105. 3(2-2) F,S,Sum.* The principles of drafting, drawing and twist. Errors in drafting. Review of yarn numbering. Fiber opening, cleaning and blending. Short- and long-staple yarn production. Fiber and filament production. Texturing. Quality control.

T 250 Textile Fabrics: Formation and Structure. *Preqs: T 105 and MA 111. 3(2-2) F,S,Sum.* Basic concepts in weaving, knitting and nonconventional fabric production systems. Fundamentals of the conversion of fibers and yarns into fabrics. Relationships of fabric design, construction and raw materials with properties and performance of end product.

T 301 Technology of Dyeing and Finishing. *Preq: T 203. 4(3-2) F,S,Sum.* Basic principles and procedures for the preparation, dyeing, printing, and finishing of natural and man-made fibers. The chemical nature of dyes and fastness properties, and the chemical nature of finishes used to impart specific end-use properties.

T 401 Environmental Aspects of the Textile Industry. *Preq: Senior standing. 3(3-0) S.* Introduction to general environmental pollution sources and effects, occupational safety and health, and typical problems specific to the textile industry. Survey of natural and synthetic fiber pollution problems with case histories of successful solutions. Management techniques for pollution control by waste reduction, treatment, and effluent control. Safety and health management for hazards in the industry.

BULLERWELL

T 402 Introduction to the Theory and Practice of Fiber Formation. *Preqs: CH 103, T 203, MA 212, PY 212. 3(3-0) S.* Fundamental theory of flow behavior of polymeric materials as related to the formation of fibers by melt, dry and wet extrusion is discussed. Elementary theories of drawing and heat setting are also analyzed. This background is then applied to interpret the entire fiber forming processes of representative all-synthetic and cellulosic fibers.

CUCULO

T 491H Honors Seminar in Textiles. *By invitation into Honors Program in Textiles. 1(1-0) F,S.* A seminar on various topics in the fields of Textiles and Fiber and Polymer Science.

T 493 Industrial Internship in Textiles. *Preq: Textile core courses. (Minimum GPA 2.0). Limited to three credits per student; 10 weeks of 40 hours required. 3 F,S,Sum.* Paid professional level work experience in textiles, relating academic training in science and technology to industrial practice under professional guidance. Written reports used for grading. Appropriate department head approval required.

Selected 500-Level Courses Open To Advanced Undergraduates

T 500 Fiber and Polymer Microscopy. *Preqs: MA 212, PY 212, T 203. 3(1-4) F.*
TUCKER

T 506 Color Science. *Preq: Sr. in TC or grad. standing. 3(2-2) F.*

TEXTILE CHEMISTRY

TC 210 Preparation for Textile Chemical Processing. *Preq: T 203; Coreq: CH 107. 3(2-3) F.* The principles of preparing greige fabrics for dyeing or printing and finishing. Includes an introduction to textile wet processing, physical and chemical mechanisms in fabric cleaning and preparation, and the unit operations of preparation.

RUCKER, TOMASINO

TC 305 Introduction to Color Science and Its Applications. *Preq: PY 212 or PY 208. 2(2-0) S.* Applications of color science, especially in the textile industry: specification of object color, colorant standardization, production control, process control, computer colorant formulation. The detailed analysis of these and related applications provides the stimulus for a review of the basic physiological, physical and psychophysical phenomena which affect the perception of color and the measurement or specification of color.

McGREGOR, SMITH

TC 306 Color Laboratory. *Preq: PY 212 or PY 208; Coreq: TC 305. 1(0-2) S.* Hands-on experience which will aid students in understanding color perception, color science and color measurement. This elective course will be closely coordinated with TC 305, Introduction to Color Science and Its Applications. Limited enrollment.

McGREGOR, SMITH

TC 320 Textile Dyeing and Printing. *Preqs: T 203, TC 210; Coreq: CH 223. 4(3-3) F.* The chemistry and technology involved in the wet processing of fibrous systems, especially dyeing and printing. Emphasizes principles and includes a study of the various classes of dyes and their application to all important textile fibers and blends of fibers; printing and print formulations for important dye classes.

MOCK, RUCKER

TC 330 Textile Finishing. *Preqs: T 203, TC 210; Coreq: CH 223. 3(2-3) S.* The chemical and mechanical principles for obtaining desirable fabric properties such as durable press, shrinkage control, water repellency, soil release and other properties needed for marketable fabrics will be emphasized in lectures. Laboratory will promote hands-on exposure to these principles.

FREEMAN, TOMASINO

TC 405 Chemical and Physical Evaluation of Textiles. *Preqs: T 250; TC 320 and TC 330 or T 301. 3(2-3) F.* The development, use and interpretation of results from standard tests indicating quality and determining serviceability and performance of textile end-products, with emphasis on finished fabrics.

BECK, SMITH

TC 406 Textile Chemical Technology Laboratory. *Preqs: TC 405 or T301. 2(0-6) S.* Laboratory and pilot plant projects in the application of selected dyes and finishes.

LIVENGOOD, MOCK

TC 412 Textile Chemical Analysis. *Preq: T 203. 3(2-3) S.* Application of certain techniques of analysis to fibers, textile chemicals and textile processes; ultraviolet, visible and infrared spectrophotometry; chromatography; viscometry; interfacial tension; calorimetric, gravimetric and mechanical thermal analyses. Emphasis on solving problems of analysis involving such processes as sorption, solution, diffusion, crystallization, etc.

BECK, RUCKER

TC 415 Principles and Practice of Textile Printing. *Preq: T 301 or TC 320 or PD (TMT) 272, junior standing. 3(2-3) F.* A systematic introduction to the technological aspects of commercial fabric printing. Emphasis is placed on developing a working knowledge of the interrelationships between various colorants, auxiliaries, substrates, and mechanical equipment and processes currently used in industry.

TC 441 Theory of Physico-Chemical Processes in Textiles I. *Preqs: MA 301, or 212, PY 205 or 211. 3(2-2) F.* First semester of a two semester sequence that deals with the principles of physical chemistry, surface chemistry and transport phenomena and their application to textile wet processing. Special emphasis is placed on thermodynamics, phase equilibria, cohesive energy, intermolecular forces, chemical kinetics, momentum transport in Newtonian and non-Newtonian fluids, diffusion and heat transfer. SMITH, THEIL

TC 442 Theory of Physico-Chemical Processes in Textiles II. *Preq: TC 441. 3(2-2) S.* Second semester of a two semester sequence that deals with the principles of physical chemistry, surface chemistry and transport phenomena and their application to textile wet processing. Special emphasis is placed on thermodynamics, phase equilibria, cohesive energy, intermolecular forces, chemical kinetics, momentum transport in Newtonian and non-Newtonian fluids, diffusion and heat transfer. SMITH, THEIL

TC 451 Computers in Textile Wet Processing. *Preqs: MA 212, PY 212, T 301. 3(3-0) S.* An introduction to basic microelectronics and microelectronic circuit elements and to the available hardware including microprocessor chips, microcomputers and minicomputers. Direct digital control of wet processes will be examined using specific examples of current practical applications. MOCK

TC (CH) 461 Introduction to Fiber-Forming Polymers. *Preq: CH 223. 3(3-0) F.* Lectures emphasize: the formation and properties of fiber-forming polymers; addition and condensation polymerization; theories of fiber structure, the relationship between the chemical structure and physical properties of natural and man-made fibers; the production of man-made fibers. GILBERT, TOMASINO

TC 490 Special Topics in Textile Chemistry. *1-6 F,S,Sum.* Directed research or independent study or experimental course offerings in textile and polymer chemistry.

TC 491 Seminar in Textile Chemistry. *Preqs: TC 320, TC 330 and senior standing. 1(0-2) S.* Familiarizes student with the principal sources of textile chemistry literature and emphasizes importance of keeping abreast of developments in the field. Emphasizes fundamentals of technical writing. Reports. Lectures arranged.

Selected 500-Level Courses Open To Advanced Undergraduates

TC 504 Fiber Formation—Theory and Practice. *Preqs: MA 301, PY 208 or CI. 3(3-0) F.*

TC 505 Theory of Dyeing. *Preq: CH 433 or CI. 3(3-0) S.*

TC 520 Chemistry of Dyes and Color. *Preqs: CH 221 and 223. 3(3-0) S.*

TC 530 The Chemistry of Textile Auxiliaries. *Preq: One year of organic chemistry. 3(3-0) F.*

TC 561 Organic Chemistry of High Polymers. *Preqs: TC (CH) 461, CH 331 or CH 431. 3(3-0) S.*

TC (CH) 562 Physical Chemistry of High Polymers—Bulk Properties. *Preqs: CH 220 or 223, CH 331 or 431. 3(3-0) F.*

TC 565 Polymer Applications and Technology. *Preq: One year of organic chemistry; TC 461. 3(3-0).*

TC (CHE) 569 Polymers, Surfactants and Colloidal Materials. *Preqs: CHE 316, CH 223. 3(3-0) F.*

TC (CHE) 570 Radiation Chemistry and Technology of Polymeric Systems. *Preqs: CH 221, 431. 3(3-0) S.*

TC 591 Special Topics in Textile Science. *Preqs: Sr. or grad. standing and CI. 1-4 F,S.*

TEXTILE ENGINEERING

TE 201 Polymer and Fiber Science and Engineering. *Preqs: MA 201, CH 105 or CH 107. 4(3-2) S.* Principles of polymer chemistry; chemical and physical properties of polymers; engineering principles of fiber formation; properties and uses of fibers.

TE 301 Textile Manufacturing Processes and Systems I. *Preqs: TE 201, PY 205, MA 202; Coreq: MAE 314 or CE 313. 4(3-2) F.* Engineering analysis of textile structures, especially yarns. Unit processes of production, handling and packaging. Production sequences, intermachine effects, machine design and their consequences on the textile product.

TE 302 Textile Manufacturing Processes and Systems II. *Preq: TE 301. 4(3-2) S.* Mechanisms used in the production of woven, knitted and nonwoven fabrics. Design and operation of these mechanisms and their impact on the fabric. System dynamics of the different fabric forming processes.

TE 303 Textile Chemical Processes. *Preqs: MAE 301, MAE 308, TE 302. 4(3-2) F.* Thermodynamic concepts of material and energy balances describing preparation, dyeing, drying, humidification and chemical reactor design for selected textile chemical wet processes.

TE 401 Textile Engineering Design I. *Preqs: TE 302; MAE 208 or CE 215; MAE 314 or CE 313; Coreq: TE 303. 4(3-3) F.* The design process including initial specification, design constraints, sources of information and design strategy. Development of fact finding ability in areas unfamiliar to the student. Analysis of existing designs and the development of improved or new designs.

TE 402 Textile Engineering Design II. *Preq: TE 401. 4(2-6) S.* Application of engineering and textile science to the design of textile machines and processes. Design, construction, and evaluation of a modular component of a selected machine.

TE 403 Mechanics of Fibrous Structures. *Preqs: TE 201, MA 301, MAE 314 or CE 313. 3(3-0) F.* Mechanics of fibrous structures including fibers, yarns and fabrics. Transverse isotropy of fibers; tensile, bending, and shear behavior of fabrics.

TE 404 Textile Process Quality Control. *Preqs: ST 361; TE 302; ECE 331. 4(3-2) S.* Defining and quantifying quality of textile products; quality control by statistical sampling and continuous monitoring. Design of continuous monitoring and control systems; applications to textile systems design.

TEXTILE ENGINEERING AND SCIENCE

TES 305 Direct Fiber to Fabric Production. *Preqs: T 203, PY 211 or 205; Coreqs: ST 361, PY 212 or 208. 3(2-2) F,S.* An intermediate course providing an understanding of modern fabrics which are produced directly from fibers or their precursors. The physical and chemical nature of local bonding and fiber entanglement will be studied. Viable processes for the production of these classes of fabrics, together with the economic justification for process and production, will be discussed. Plant visits will be arranged whenever possible.

TES (TMT) 320 Mechanics of Spun Yarn Manufacturing Systems. *Preq: T 220; Coreq: T 211. 4(3-2) F,S.* (See Textile Management and Technology.)

TES (TMT) 330 Textile Measurements and Quality Control. *Preq: T 211, 220, 250, ST 361. 4(3-2) F,S.* (See Textile Management and Technology.)

TES (TMT) 351 Weaving Systems. *Preq: T 250. 3(2-2) F,S.* Technology of producing woven fabrics. The range of fabric structures is reviewed but the major emphasis is on yarn preparation for weaving, the basic mechanics of looms, the technologies of production, new developments and management of weaving operations.

TES (TMT) 370 Technical Fabric Design. *Preq: T 250. 4(3-2) S.* (See Textile Management and Technology.)

TES 405 Contemporary Nonwoven Textiles. *Preqs: TES 305, senior standing and consent of instructor. Limited to 25 students. 3(1-4) S.* Group studies of selected nonwoven textile products and processes with format characteristic of contemporary R&D performed in a studio setting. Groups will pursue advanced study of systems for direct conversion of fiber to fabrics including plant, processes and equipment layout, labor assignment, costs of manufacture, material flow, capital cost and market projections. **GEORGE**

TES (TMT) 420 Modern Developments in Yarn Manufacturing. *Preq: Sr. standing. 3(3-0) S.* The modern and emerging systems of yarn manufacturing with emphasis on the economic consequences of changes. Optimization of new and existing equipment to minimize costs and maximize the competitive position of the user. **LORD**

TES (TMT) 425 Textured Yarn Production and Properties. *Preqs: T 211, 220, PY 211 (205); Coreq: PY 212 (208). 3(2-2) F.* (See Textile Management and Technology.)

TES 450 Advanced Weaving. *Preq: TES (TMT) 351. 3(2-2). F. Alt. yrs.* New developments in weaving machinery, weaving of specialty fabrics and organization of weaving operations. **MOHAMED**

TES (TMT) 451 Advanced Woven Fabric Design. *Preq. TES (TMT) 370. 3(2-2) F. Alt. yrs.* Design and production requirements for highly specialized woven fabric structures. The laboratory activities will include a project on design from concept to final production and finishing. **MOHAMED**

TES 460 Physical Properties of Textile Fibers. *Preqs: MA 212, PY 212. 3(3-0) F,S.* The course covers structural and physical properties of textile fibers including mechanical, thermal, optical, frictional, electrical and moisture properties. The relationships between structure, properties and performance are considered.

TES 461 Mechanical Properties of Fibrous Structures. *Preqs: MA 301, TES 460. 3(3-0) S.* Interrelationships between elastic and viscoelastic mechanical properties of single fibers and assemblies of fibers. Emphasis placed on how uniqueness of fibers as elements of matter translate into assemblies also having unique properties. Assemblies covered include yarns, fabrics and fiber reinforced composites. Utility and properties of polyblend fibers discussed. **HERSH**

TES 490 Development Project in Textile Technology. *Preqs: Sr. standing and 2.75 GPA. Course may be taken twice provided projects are different subject matter. 2-3 F,S,Sum.* Introduction to research through experimental, theoretical and literature studies of textile and related problems.

TES 491 Special Topics in Textiles. *Preq: Sr. standing. 1-3 F,S.* Special topics related to current developments in the textile industry.

TES (TMT) 495 Senior Seminar in Textile Materials and Management. *Preqs: Senior standing and CI. Restricted to students in the School of Textiles. 1(1-0) F.* (See Textile Management and Technology.)

Selected 500-Level Courses Open To Advanced Undergraduates

TES 505 Textile Instrumentation and Control Systems. *Preqs: MA 301, PY 212, and one course in computer science. 3(3-0) F.*

TES (TMT) 520 Yarn Processing Dynamics. *Preq: MA 301 or CI or grad. standing. 3(2-2) F.*

TES (TMT) 530 Textile Quality Control. *Preq: TMT (TES) 330 or CI. 3(3-0) S.*

TES (TMT) 541 Theory and Practice of Knitted Fabric Production and Control. *Preqs: TMT (TES) 370 and CI. 3(3-0) F.*

TES (TMT) 555 Production Mechanics and Properties of Woven Fabrics. *Preqs: MA 301 and CI or grad. standing. 3(2-2) S.*

TES (TMT) 561 Mechanical and Rheological Properties of Fibrous Material. *Preq: MA 301. 3(2-2) S.*

TES (TMT) 562 Physical Properties of Fiber Forming Polymers, Fibers and Fibrous Structures. *Preqs: MA 301, PY 208. 3(3-0) F.*

TES (TMT) 563 Characterization of Structure of Fiber Forming Polymers. *Preqs: MA 301, PY 208. 3(3-0) F.*

TES 590 Special Projects in Textiles. *Preqs: Sr. standing or grad. standing, CI. 2-3 F,S,Sum.*

TES 591 Special Topics. *Preq: CI. 1-4 F,S.*

TES 598 Textile Technology Seminar. *Preqs: Sr. standing, CI. 2(2-0) S.*

TEXTILE MANAGEMENT AND TECHNOLOGY

TMT (PD) 170 Textile Design Orientation. *1(0-2) S.* Orientation course designed to present the breadth and scope of the Textile Design profession together with future opportunities in this field.

TMT 215 Introduction to Apparel Technology. *Preq: T 200 or School of Textiles sophomore. 3(3-0) S.* Study of selection of raw materials and manufacturing processes for producing acceptable mass-produced apparel products. Emphasis also placed on design and assembly methods to provide functionality, quality, and fit. Planned field trips as available.

TMT (PD) 272 Printed Textile Design. *Preq: A grade of C or better in DF 111 or DF 101. 3(0-6) S.* Design and production of printed and pattern-dyed fabrics. Development of design abilities through hand production methods with an awareness of industrial processes.

TMT 315 Apparel Production I. *Preq: TMT 215. 3(2-2) F.* Concepts and practices for the production of basic apparel items, beginning with selection of fabric and other raw material garment components and extending through pattern development, pattern grading, and pattern engineering. Techniques for development of styled patterns and for solution of problems of fit.

TMT 316 Apparel Production II. *Preq: TMT 315. 3(2-2) S.* Principles of apparel manufacturing: markers (stencils and computer); spreading and cutting technology; and seaming, stitching, and joining for industrial sewing machines and ultrasonic machines; pressing.

TMT (TES) 320 Mechanics of Spun Yarn Manufacturing Systems. *Preq: T 220; Coreq: T 211. 4(3-2) F,S.* A study of machine-fiber interactions in spun yarn manufacturing processes such as: blending, drafting, spinning and packaging. The course will also analyze factors affecting production rate and quality requirement.

TMT (TES) 330 Textile Measurements and Quality Control. *Preqs: T 211, T 220, T 250, ST 361. 4(3-2) F,S.* Principles of measuring basic physical properties of textile materials; techniques of in-process control and evaluation of product quality; application to the manufacturing sequence of statistical control charts and capability limits; aspects of sampling theory.

TMT 331 Quality Control for Textile Production Management. *Preqs: T 211, T 220, T 250, ST 361. Not for students who take TMT (TES) 330. 3(2-2) F,S.* Principles of quality control applied by management to the production process; techniques of decision making relative to product quality and profits; attitudes and responsibilities for quality; systems for quality assurance.

TMT 341 Knitting Systems. *Preq: T 250. 3(2-2) F,S.* Technology of producing knitted fabrics. The range of fabric structures is reviewed, but the major emphasis is on yarn preparation for knitting, the basic mechanics of weft and warp knitting machines, patterning mechanisms, technologies of production, new developments and management of knitting operations.

TMT 350 Fabrics and Their End Uses. *Preqs: Both T 220 and T 250 or T 200. 3(2-3) S.* A basic course in the relationship of end-use applications to the style and design of textile fabrics. Influence of current manufacturing technology will be discussed and the consumer viewpoint emphasized. **MASSEY**

TMT (TES) 351 Weaving Systems. *Preqs: T 250. 3(2-2) F,S.* (See Textile Engineering and Science.)

TMT (TES) 370 Technical Fabric Design. *Preq: T 250. 4(3-2) F,S.* Technical aspects of textile fabric design. Available technologies are reviewed; properties of woven, knitted and nonwoven fabrics, methods of reproducing structural designs and means of designing fabrics to specifications are covered. Laboratory consists of formal designs, analyses, testing and design projects.

TMT (PD) 371 Woven Textile Design. *Preq: T 105. 3(1-4) F.* Design and production of woven fabrics, including an exploration of various basic structures, color effects and textural effects. Development of design abilities through hand production methods with an awareness of industrial processes. **DONALDSON**

TMT (PD) 372 Knitted Textile Design. *Preq: T 105. 3(1-4) S.* Design and production of both hand- and machine-knitted fabrics, jacquard patterning, and color effects. Development of design abilities through practical application of hand- and machine-production methods. Awareness of industrial processes. **DONALDSON**

TMT 380 Management and Control of Textile Systems. *Preqs: EB 201, T 220, T 250, or jr. standing in textile engineering. 3(3-0) F,S.* Management approaches and practices and basic economic considerations in the development, production, and distribution of industrial and consumer textile and apparel products.

TMT 381 Supervision in the Textile Industries. *Preqs: TMT 380, PSY 200. 3(3-0) F,S.* A specialized study of supervision as applied to the specific problems confronting the textile industry. Emphasis is placed upon the role of supervisors in maintaining productivity in an atmosphere wherein continuing and critical problems prevail. Competencies needed in supervisors in order to effectively discharge their responsibilities are emphasized. **ROBINSON**

TMT 382 Principles of Soft Goods Marketing. *Preq: EB 201. Credit not allowed for both TMT 382 and EB 313. 3(3-0) F.* Principles of marketing textiles in the consumer goods sector. Emphasis on market segmentation, product strategy, pricing decisions, promotion and channels of distribution. Interface between textile manufacturers and those producing apparel and upholstered furniture. Marketing channel for apparel to the retailer. **BERKSTRESSER, CLAPP**

TMT 383 Management Aspects of Textile Product Development. *Preqs: T 211, T 220, T 250, T 301. 3(3-0) S.* Development of products in order to meet profit goals. Integrates technology skills with management skills in problem solving. **BERKSTRESSER**

TMT (TES) 420 Modern Developments in Yarn Manufacturing. *Preq: Sr. standing. 3(3-0) S.* (See Textile Engineering and Science.)

TMT (TES) 425 Textured Yarn Production and Properties. *Preqs: T 211, T 220, PY 211 (205); Coreq: PY 212 (208). 3(2-2) F.* Emphasizes the structure of continuous filaments and their responses to elevated temperatures, air flow and other methods of modification to produce bulked, textured and torque yarns. Related properties such as stress relaxation, and generation and control of electrostatic charges are also discussed. In addition, a field trip will be arranged if possible. **EL-SHIEKH, JOHNSON, TUCKER**

TMT 431 Fabric Performance Testing. *Preqs: TMT (TES) 330, senior standing. 3(2-2) F.* Special and advanced techniques for measuring selected physical and aesthetic properties of natural and man-made textile materials; application of the physical law to technique and instrumentation; interrelation of the material, method of test, instrumentation involved and the resulting physical measure. **CLAPP**

TMT 443 Advanced Knitting Systems and Fabrics. *Preq: TMT 341. 3(2-2) F.* Loop forming concepts and mechanisms of complex warp and weft-knitted fabrics. Structural design and limitations, potential applications and knitability. Analysis of mechanical systems and tensioning forces on fabric formation. The effect of design on dimensional and mechanical properties.
LITTLE, SMITH

TMT (TES) 451 Advanced Woven Fabric Design. *Preq: TMT (TES) 370. 3(2-2) F, Alt. yrs.* (See Textile Engineering and Science.)

TMT (PD) 470 Textile Design Studio. *Preq: A grade of C or better in TMT (PD) 272, 371, and 372. 6(0-9) F.* Semester design project based on a single problem statement. Individual investigation of resources, processes and solutions in the development of a collection of fabrics or end products. Public exhibition of collections.
WILCHINS

TMT 480 Textile Production and Cost Control. *Preqs: TMT 380, EB 301, ACC 265 or 260, senior standing. 3(3-0) F,S.* Fundamental concepts in textile production and operations management as well as analytical techniques and controls necessary for decision-making and management in a textile environment.
BERKSTRESSER, POWELL

TMT (EB) 482 Textile Marketing Management. *Preqs: EB 313, EB 301, TMT 380. 3(2-2) F,S.* The development and state of the art of current textile marketing management theory and practice are covered in classroom sessions. Management lab sessions include experiential, marketing games, and role-playing exercises. Current industry practice and government relations are stressed.
BERKSTRESSER

TMT 484 Management Decision Making for the Textile Firm. *Preqs: TMT 480, EB 302; Coreq: TMT (EB) 482. 3(3-0) F,S.* The economic, institutional and environmental setting within which the textile firm makes management decisions, including in-depth analyses of specific issues and problem areas as they affect the textile industry. Special emphasis will be given to topics of current interest and significance.
BERKSTRESSER, MOSS

TMT 487 Textile Labor Management. *Preq: Sr. standing. 3(3-0) F,S.* Labor management problems in the textile industry, with emphasis directed toward role of production supervision in a non-union textile plant. A study of NLRB decisions and court opinions involving textile corporations.
POWELL

TMT 490 Development Project in Textile Technology. *Preqs: Sr. standing and 2.75 GPA. Course may be taken twice provided projects are different subject matter. 2-3 F,S,Sum.* Introduction to research through experimental, theoretical and literature studies of textile and related problems.

TMT 491 Special Topics in Textiles. *Preq: Sr. standing. 1-3 F,S.* Special topics related to current developments in the textile industry.

TMT (TES) 495 Senior Seminar in Textile Materials and Management. *Preq: Senior standing and consent of instructor. Restricted to students in the School of Textiles. 1(1-0) F.* Topics of current interest in the textile and allied industries are presented by guest lecturers. Written reports and discussions required of students.

Selected 500-Level Courses Open To Advanced Undergraduates

TMT (TES) 520 Yarn Processing Dynamics. *Preqs: MA 301 and CI or grad. standing. 3(2-2) F.*

TMT (TES) 530 Textile Quality Control. *Preq: TMT (TES) 330 or CI. 3(3-0) S.*

TMT (TES) 541 Theory and Practice of Knitted Fabric Production and Control. *Preqs: TMT (TES) 370 and CI. 3(3-0) F.*

TMT 549 Warp Knit Engineering and Structural Design. *Preq: TMT 443. 3(3-0) S.*

TMT (TES) 555 Production Mechanics and Properties of Woven Fabrics. *Preqs: MA 301 and CI or grad. standing. 3(2-2) S.*

TMT (TES) 561 Mechanical and Rheological Properties of Fibrous Material. *Preq: MA 301. 3(2-2) S.*

TMT (TES) 562 Physical Properties of Fiber Forming Polymers. *Fibers and Fibrous Structures. Preqs: MA 301, PY 208. 3(3-0) F.*

TMT (TES) 563 Characterization of Structure of Fiber Forming Polymers. *Preqs: MA 301, PY 208. 3(3-0) F.*

TMT (EB) 585 Market Research in Textiles. *Preqs: TMT (EB) 482. 3(3-0) S.*

TMT 590 Special Projects in Textiles. *Preqs: Sr. standing or grad. standing, CI. 2-3 F,S,Sum.*

TMT 591 Special Topics. *Preq: CI. 1-4 F,S.*

TOXICOLOGY

Selected 500-Level Courses Open to Advanced Undergraduates

TOX 510 Biochemical Toxicology. *Preqs: Biochemistry, sr. standing. 3(3-0) S.*

TOX 515 Environmental Toxicology. *Preq: Two years of biology. 3(3-0) F.*

UNIVERSITY STUDIES

UNI 201 Environmental Ethics. *3(3-0) F,S.* Designed to create an opportunity for students from different fields to study ways in which their majors coupled with personal/cultural values contribute towards either solving or compounding environmental problems. The course focuses on certain environmental problems as reflections of personal/professional/cultural values. It provides a framework for the process of making ethical decisions.
MALLOY-HANLEY

UNI 211 Alcohol Use and Abuse. *3(3-0) F,S.* The history of human involvement with alcohol is reviewed. Physiological, cultural, sociological, and psychological aspects of drinking alcohol are explored. Responsible use patterns; chronic abuse; current educational, prevention, and rehabilitation areas are explored. Students will have the option to develop peer helper skills during the course.

UNI 220 Oceans: Our Continuing Frontier. *3(3-0) F.* Interdisciplinary approach to current issues, scientific concepts, literature and future trends concerning the oceans. Required weekend field trip.
SPENCE

UNI 295 Special Topics in University Studies. *1-6 F,S.* Examination at an intermediate level of selected topics of an interdisciplinary nature.

UNI 301 Science and Civilization. *Preq: Soph. standing. 3(3-0) F,S.* An inquiry into the scientific achievement and cultural impact of three different, but interrelated, models (or paradigms) of understanding the world and man's place in it; the Ancient-Medieval model of Aristotle, Ptolemy and Aquinas; the 17th century model of Newtonian physics; and the emerging, but fragmentary, 20th century model based upon the "new physics" of Einstein, Planck and Heisenberg.

BONHAM, HOFFMAN, MALLOY-HANLEY, RIDDLE, STALNAKER

UNI 302 Contemporary Science and Human Values. *Preq: Soph. standing. 3(3-0) F,S.* An interdisciplinary evaluation of recent and potential influences of current scientific-technological developments on society. Emerging social, ethical, and intellectual issues include: the adequacy of contemporary scientific frameworks; the relations among science, technology, and society; the social consequences of scientific applications; and human prospects and possibilities.
BAREFOOT, HUISINGH, HOFFMAN, KORTE

UNI 303 Humans and the Environment. *3(3-0) F,S,Sum.* An interdisciplinary examination of the effects of human population growth and of humanity's increasing utilization of the earth's finite resources along with the major environmental problems thus produced. Attention is focused upon the inputs required for environmental decision-making and environmental problem solving. Possible choices for developing an ecologically sound and humane future explored.
ADAMS

UNI 323 World Population and Food Prospects. *3(3-0) S.* A multidisciplinary examination of the dynamics of population size and food needs, production, distribution and utilization. Consequences of inadequate nutrition and man's food choices will be examined. International efforts to increase the compatibility of effective food production systems with the environment will be emphasized. Alternate crops and cropping systems will be examined in relation to energy, yield, and quality considerations.

PATTERSON

UNI 324 Alternative Futures. *3(3-0) F,S.* Possible alternative futures and the cutting edge of the present in perspective. Special emphasis on the nature and likelihood of various alternatives, the methodology and limitations of forecasting, selected futurist issues, and the interactions between present and possible technologies and human values.

HOFFMAN

UNI 325 Bio-Medical Ethics: An Interdisciplinary Inquiry. *3(3-0) F.* An interdisciplinary examination and appraisal of emerging ethical and social issues resulting from recent advances in the biological and medical sciences. Abortion, euthanasia, consent, truth-telling, confidentiality, paternalism, genetic engineering and behavior control. Focus on factual details, value questions, the interplay of "fact" and "value," assessment of impacts, and questions of policy formulation.

STALNAKER

UNI 326 Technology Assessment. *3(3-0) S.* Methodological analysis of the desirable and undesirable impacts of old or new technologies as they are applied or innovated in society. Consideration is given to description and forecasting of immediate and derived effects, interactions, and potential irreversibilities. Students will collaborate in an assessment.

HOFFMAN

UNI 327 Material Resources of Society. *Sophomore standing. 3(3-0) F,Sum.* An interdisciplinary examination of the materials and resources upon which our modern technological society depends. Topics will include an overview of the economic, environmental, political and scientific factors that underlie the acquisition and use of natural resources in advanced industrial economies (societies).

UNI 334 Human Sexuality. *3(3-0) F.* An interdisciplinary consideration of the historic and cultural background of human sexuality and of the physiological and psychological aspects of sexual response and reproduction. Includes study of development of sexual values and variations of sexual behaviors. Intended to assist students in understanding their personal experiences and to acquaint them with research findings and diverse views presented in human sexuality literature.

STALNAKER

UNI 401 The Contemporary City: Problems and Prospects. *3(3-0) S.* An interdisciplinary examination of the social and physical characteristics of the contemporary city and the problems which cities face. Topics will include urban design, social relationships, education, transportation, crime and violence and urban psychology. Alternative solutions to various urban problems will be discussed.

KORTE

UNI 402 Peace and War in the Nuclear Age. *3(3-0) F.* An interdisciplinary examination of contemporary wars and international conflicts, arms races, nuclear strategy and defense policy, arms control, and theories of peace.

UNI 405 Technology and American culture. *3(3-0) F,S,Sum.* An interdisciplinary study of the role of technology in American culture which examines the ideological, political, social, economic, and institutional contexts of technological change from the 1760's to the present, and explores the cultural impacts of new technological systems.

UNI 410 Toxic Substances and Society. *Preq: Junior standing. 3(3-0) S.* An interdisciplinary evaluation of the past, present and future human health effects of toxic substances at work, at home, and through our food. The political, economic and ethical dimensions of toxic substances and ways of minimizing their adverse effects.

HUISINGH

UNI 412 Entering the 21st Century: Agricultural, Technological & Environmental Perspectives. *3(3-0) F.* Systems approach to predictions about the world in the year 2000 from the perspectives of agricultural and environmental studies. Attention to food production, fisheries, forests, water, energy, material resources for fuel, climate, and population. Guest lectures and class projects.

UNI 490 Seminar in University Studies. 1-3. Investigation and discussion of selected topics of an interdisciplinary nature.

UNI 495 Special Topics in University Studies. 1-6 F,S. Examination of selected topics of an interdisciplinary nature. HUISINGH

Selected 500-Level Courses Open To Advanced Undergraduates

UNI (FOR) 584 The Practice of Environmental Impact Assessment. 4(0-8) F.

UNI 595 Special Topics in University Studies. *Preq: Grad. standing or CI.* 1-3 F,S.

VISUAL DESIGN

(Also see DN—Design; PD—Product Design.)

VD 400 Intermediate Visual Design (Series). *Preq: DF 102. May not be taken more than six times. 6(0-9) F,S.* Investigations of visual environment through the agency of various materials and processes leading to professional competence. Students select from a number of vertically organized workshop studios which offer on an optional basis a wide range of program emphases.

Selected 500-Level Courses Open to Advanced Undergraduates

VD 517 Advanced Typographic Systems. *Preq: DN 217 and 317. 3(2-2) F.*

VD 518 Advanced Typographic Expression. *Preq: DN 217 and 317. 3 (2-2) S.*

VD 541, 542 Advanced Visual Design I, II. *Preq: ARC 400, LAR 400, PD 400, or VD 400; waiver of prerequisite is at the discretion of the instructor. 6(3-9) F, S.*

VETERINARY MEDICINE

VMA 490 Special Topics in Anatomy, Physiological Sciences and Radiology. *Preq: Approval of department. Undergraduate students only. 1-6 F,S,Sum.* Offered as needed to cover new or special subject matter within the scope of veterinary medicine at the undergraduate level.

VMC 490 Special Topics in Companion Animal and Special Species Medicine. *Preq: Approval of department. Undergraduate students only. 1-6 F,S,Sum.* Offered as needed to cover new or special subject matter within the scope of veterinary medicine at the undergraduate level.

VMF 401 Poultry Diseases. 4(3-3) S. The major infectious, noninfectious and parasitic diseases of poultry are studied with respect to economic importance, etiology, susceptibility, dissemination, symptoms and lesions. Emphasis upon practices for prevention, control and treatment of each disease.

VMF 420 Diseases of Farm Animals. *Preqs: CH 101, 103. 3(3-0) S.* The pathology of bacterial, viral, parasitic, nutritional, thermal and mechanical disease processes for farm animals are studied. This course emphasizes practices for prevention and control of each disease.

VMF 490 Special Topics in Food Animal and Equine Medicine. *Preq: Approval of department. Undergraduate students only. 1-6 F,S,Sum.* Offered as needed to cover new or special subject matter within the scope of veterinary medicine at the undergraduate level.

VMM 490 Special Topics in Microbiology, Pathology, and Parasitology. *Preq: Approval of department. Undergraduate students only. 1-6 F,S,Sum.* Offered as needed to cover new or special subject matter within the scope of veterinary medicine at the undergraduate level.

Selected 500-Level Courses Open To Advanced Undergraduates

VMS 530 Veterinary Histology. *Preqs: BCH 451 and CI. 3(2-4) Alt. F.*

VMS 540 Research Animal Care and Use. *Preq: ZO 201 or equivalent. 3(2-3) Alt. S.*

VMS 590 Special Topics in Veterinary Medical Sciences. *Preq: Sr. or grad. standing. 1-3 F,S,Sum.*

WOOD AND PAPER SCIENCE

WPS 101 Introduction to Wood and Paper Science. *1(1-0) F.* Wood utilization in solid, fiber, and chemical form. Curricula and careers in wood utilization.

WPS 102 Introduction to Pulp & Paper Science & Technology. *1(1-0) S.* Introduction to terminology and technology specific to the pulp and paper industry with emphasis on the processes by which wood is converted into paper products.

WPS 201 An Introduction to Wood Structure, Properties and Products. *Not for students enrolled in FOR and WST. 3(2-3) S.* The study of wood as a raw material. Structure and physical properties of wood and their influence on wood use. The manufacturing processes, properties and use of important commercial products. Laboratories concerned with wood identification and experiments on wood physical properties. THOMAS

WPS 202 Wood Structure and Properties I. *Preq: BS 100 or BO 200. 3(2-3) S.* Formation, anatomy, and properties of wood. Structural features of softwoods and hardwoods and the relationships among anatomy, physiology, physical and mechanical properties. Variability, naturally occurring defects, and wood deterioration are discussed and related to wood utilization. Techniques on hand lens and microscopic identification of wood. WHEELER

WPS 203 Wood Structure and Properties II. *Preqs: WPS 202; PY 221 or PY 211. 4(3-2) S.* Physical properties of wood, specific gravity relationships, wood in relation to moisture, heat, sound, light, electricity, combustion, introduction to strength properties of wood. HART

WPS 205 Wood Products Practicum. *Preq: WPS 201 or 203. 5 Sum.* Preparation of drawings and bill of materials for a furniture item. Parts are machined, assembled, and finished. Lumber grading, drying, and gluing principles. Four to five days are spent visiting industries to provide an appreciation for products and processes. The student is responsible for room and board; transportation is provided. GILMORE, KELLY

WPS 210 Forest Products Internship. *Preq: Completion of summer practicum. 1 F,S,Sum.* Experience in the forest products or related industries with a departmentally selected employer.

WPS 211 Pulp and Paper Internship. *Preq: Completion of soph. year. 1(1-0).* Experience in the pulp and paper industry. The student is assigned problem solving in an industrial setting to gain insight of pulp and paper technology. Students write a report on their experience.

WPS 220 Wood Protection. *Preqs: WPS 202, CH 101; Coreq: CH 103. 3(2-3) F.* Description of the deterioration of wood by various agents such as fungi, insects, fire, weather, and chemicals, and the methods of protecting wood against their action. GOLDSTEIN

WPS 242 Wood Fiber Analysis. *2(2-0) S.* The macro and micro structure of wood and the relationships of anatomical structures to the physical properties of wood and paper. WHEELER

WPS(FOR) 273 Quantitative Methods in Forest Resources. *3(2-2) F,S.* (See Forestry.)

WPS 301 Wood Processing I. *Preq: WPS 203. 3(2-2) F.* The process of drying, gluing, and finishing wood. Drying procedures, glued wood products, and furniture and panel finishing are described. Current equipment used in the industry is covered. KELLY

WPS 302 Wood Processing II. *Preqs: WPS 301. 3(2-3) S.* Theories and techniques of converting raw wood into usable products by milling, veneering and chipping round wood. Processing of finished lumber, dimension stock, plywood and other wood and reconstituted wood products. KELLY

WPS 315 Introduction to Wood-Polymer Principles. *Preqs: WPS 203, CH 103. 3(3-0) F.* Basic organic chemical and polymeric terminology and principles necessary for understanding the chemical components and macrostructure of wood as well as the adhesives and finishes used in wood products manufacturing. GOLDSTEIN

WPS 316 Wood-Polymer Principles. *Preq: WPS 315. 3(3-0) S.* Emphasis on the chemical and physico-chemical properties of wood based on its polymeric chemical structure. Finishing and adhesive systems widely used in wood products manufacturing are described and characteristics detailed. GOLDSTEIN

WPS 321 Pulp and Paper Technology I. *Preqs: CH 107. 3(3-0) F.* Physical and chemical characteristics of wood and cellulose. Chemistry and technology of major mechanical, chemical and semichemical processes employed in the manufacture of pulp and paper. Processing of fibers into paper via the many commercial systems used in the paper industry.

WPS 322 Pulp and Paper Technology II. *Preq: WPS 321. 3(3-0) S.* Physical and chemical characteristics of wood and cellulose. Chemistry and technology of major mechanical, chemical and semichemical processes employed in the manufacture of pulp and paper. Processing of fibers into paper via the many commercial systems used in the paper industry.

WPS 332 Wood and Pulping Chemistry. *Preqs: CH 221, 223; PY 205, PY 208; CH 331 or CH 431 or CHE 315. 4(3-3) S.* Introduction to carbohydrate chemistry focusing on the structure and reactivity of wood polysaccharides, hemicelluloses and cellulose and on the chemical structure of lignins and wood extractives. Special emphasis on the chemical reaction of wood components occurring in pulping and bleaching processes. GRATZL

WPS 340 Forest Products. *Preq: Jr. standing. Not open to WST majors. 3(3-0) F.* Introduction to forest products industries, including their economic importance, current manufacturing technology, raw material requirements and the future of the industries. THOMAS

WPS 344 Introduction to Quality Control in Wood Products. *Preq: ST 361. 3(3-0) S.* Statistical quality control techniques applicable to the manufacture of wood products. Control chart techniques for monitoring defects, defectives and measurements. Acceptance sampling procedures. Examples from the wood products industries will be used. HART

WPS 350 Wood Technology Literature. *Preq: Jr. standing in WST. 1(1-0) S.* Introduction to scientific and trade journals by individual study of selected areas in marketing, processing, and utilization of wood-based materials with both oral and written reports of the findings. KELLY

WPS 355 Pulp and Paper Unit Processes I. *Preq: CHE 205; Coreq: WPS 321. Not open to PPT-Chemical Engineering Concentration students. 3(3-0) F.* Selected topics in chemical engineering as applied in the pulp and paper industry. Emphasis on computational practice.

WPS 360 Pulp and Paper Unit Processes II. *Preqs: CHE 303, WPS 321; Coreq: WPS 322. 3(3-0) S.* Application of chemical engineering principles to the analysis of pulp and paper unit processes. Emphasis on practical problems in fluid dynamics, heat transfer, mass transfer, and thermodynamics.

WPS 403 Paper Process Analysis. *Preqs: WPS 321, 322. 3(1-6) S.* Manufacture of several types of papers with attention to stock preparation, sizing, filling and coloring. The finished products are tested physically and chemically and evaluated.

WPS 410 Pulp and Paper Systems Analysis & Control. *Preqs: WPS 360 or CHE 312, WPS 322. 3(3-0) F.* The application of systems analysis to the design and control of pulp and paper unit operations. Topics include process analysis, modeling, simulation, and control. Computer simulation is used as an analysis tool. JOYCE, KIRKMAN

WPS 413 Paper Properties and Additives. *Preq: Sr. standing in PPT. 4(2-6) F.* The material science of paper and paperboard. Standard testing methods for paper: measurement and characterization of the structural, mechanical, and optical properties of paper; chemical analysis; microscopic examination; identification and evaluation of colorants; color matching. Effect of additives on paper properties. Relationship between paper properties and end use requirements. **OLF**

WPS 415, WPS 416 Project Management and Analysis I and II. *Preq for WPS 415: Sr. standing in PPT. Preq for WPS 416: WPS 415. 2(2-0) for each. F, S.* A two course sequence in the design, management, and analysis of technical projects. Practice in written and oral presentation of results. **JOYCE**

WPS (FOR) 423 Mechanization of Silvicultural Operations. *Preqs: Jr. standing, MA 113, MA 114, PY 221. 3(2-3) F.* (See Forestry.)

WPS (FOR) 434 Quantitative Methods of Decision Making in Forest Products. *Preqs: WPS (FOR) 273 and MA 113 and 114. 3(3-0) F.* Management science techniques and applications in forest industry. Linear programming, simulation, decision theory and inventory theory. Techniques to solve decision making problems typically encountered.

WPS 441 Introduction to Wood Mechanics. *Preqs: MA 212, PY 221 or 211. 3(3-0) F.* Statics and elementary elasticity in relation to wooden members and structures. Forces and stresses in triangulated roof and other trusses. Beam theory including the effect of shear on strength and stiffness. **PEARSON**

WPS 442 Wood Mechanics and Structural Design. *Preq: CE 211 or WPS 441. 3(2-3) S.* Wood as an engineering material and parameters affecting design of wooden members. Generalized stress-strain equations for non-isotropic materials. Relations among morphology, properties and failure. Influence of density, age, growth stresses, defects, moisture, temperature and duration of load. Creep and mechano-sorptive deformation. Visual and mechanical grading. Derivation of allowable values. Glued laminated construction, plywood and structural joints. **PEARSON**

WPS 450 Wood Industry Case Studies. *Preq: Sr. standing in WST. 2(1-3) S.* Presentation of relevant wood industry problems involving material selection, process selection and managerial techniques for solution by the student. **KELLY**

WPS 463 Plant Inspections. *Preq: Sr. standing in PPT. 1 S.* One-week inspection tour of representative manufacturers of pulp and paper products and associated industrial suppliers. Five days traveling in a group with faculty supervision during the spring vacation period. No overnight trips.

WPS 471 Pulping Process Analysis. *Preq: WPS 321, 322. 3(1-6) F.* Preparation and evaluation of different types of wood pulp. A new wood raw material is selected each year with the purpose of studying and critically evaluating the principal pulping and bleaching variables.

WPS (EB) 485 Management Development Seminar. *Preq: EB 201 or 212.* This course may not be used for credit toward an economics minor for any graduate degree. 3(3-0) S. (See Economics.)

WPS 491 Senior Problems in Wood and Paper Science. 1-4 Arr. Management or technology problems selected with faculty approval.

Selected 500-Level Courses Open To Advanced Undergraduates

WPS 513 Tropical Woods. *Preq: WPS 202. 2(1-3) Alt. F.*

WPS 515 Surface and Colloid Chemistry of Papermaking. *Preq: CH 331 or CH 431. 3(3-0) S.*

WPS 521 Chemistry of Wood Polysaccharides. *Preqs: CH 223 and WPS 332 or BCH 451. 3(3-0) Alt. F.*

WPS 522 Chemistry of Lignin and Extractives. *Preqs: CH 223 and WPS 332 or BCH 451. 3(3-0) Alt. S.*

WPS 525 Pollution Abatement in Forest Products Industries. *Preq: Grad. or advanced undergrad. standing in science or engineering curricula. 3(3-0) S.*

WPS 533 Advanced Wood Anatomy. *Preq: WPS 202 or CI. 3(1-6) Alt. S.*

WPS 540 Wood Composites. *Preqs: WPS 441; grad. or advanced undergrad. standing. 3(3-0) Alt. S.*

WPS 560 Advanced Pulp and Paper Process Analysis. *Preqs: WPS 321 and 322. 3(3-0) S.*

WPS 591 Wood and Paper Science Problems. *Preq: Sr. or grad. standing. Credits arranged.*

WPS 599 Methods of Research in Wood and Paper Science. *Preq: Advanced undergrad. or grad. standing. Credit Arranged.*

ZOOLOGY

ZO 201 General Zoology. *Preq: BS 100 or 105. 4(3-3) F,S,Sum.* Biology of the major groups of animals, with emphasis on general structural plans and diversity, reproduction, development, ecology, behavior and evolution. WALTERS

ZO 212 Basic Anatomy and Physiology. *Preq: BS 100. 4(3-3) F.* Major emphasis on the structure and function of the muscular, skeletal, circulatory and nervous systems.

ZO (MEA) 220 Marine Biology. *Preq: MEA 200 or BS 100. One weekend field trip required. 3(3-0) S.* (See Marine, Earth, and Atmospheric Sciences.)

ZO (FW) 221 Conservation of Natural Resources. *3(3-0) F,S,Sum.* (See Fisheries and Wildlife Sciences.)

ZO 290 Special Topics in Zoology. *Preq: BS 100. 1-4 Periodically.* Variable use for introductory courses to be taught experimentally.

ZO 302 Invertebrate Zoology. *Preq: BS 100. 4(3-3) F,S.* The biology and classification of invertebrate animals, especially types commonly encountered and those that illustrate zoological principles. BRADBURY

ZO 303 Vertebrate Zoology. *Preq: BS 100 or BO 200. 4(3-3) F,S, Sum.* Biology of the vertebrates; their adaptations and evolutionary history. Comparative physiological, developmental, behavioral and anatomical studies. BARTHALMUS

ZO 315 General Parasitology. *Preq: ZO 201 or 302. 3(2-3) S.* Life history, pathology and control of some common parasites of humans and important wild and domestic animals. G. MILLER

ZO 323 Comparative Anatomy. *Preqs: ZO 201 or 303; Jr. standing. 4(2-4) S.* A comparative morphology of vertebrates demonstrating the interrelationships of the organ system of the various groups. GRANT

ZO 345 Histology. *Preq: ZO 323 or 303. 4(2-4) F.* Microscopic anatomy of animal tissues. ROBERTS

ZO (FW) 353 Wildlife Management. *Preqs: BS 100, ZO 201 or ZO 303. 3(3-0) F.* (See Fisheries and Wildlife Sciences.)

ZO (BO) 360 Introduction to Ecology. *Preq: A 200 level biology course. 3(3-0) F,S,Sum.* (See Botany.)

ZO 361 Principles of Embryonic Development. *Preq: ZO 201 or ZO 302-303. 3(3-0) F,S.* The basic principles of embryonic developments are revealed through an integrated study of descriptive and experimental embryology. The development of both invertebrates and vertebrates is considered at levels of organization ranging from molecular to organismal. D. MILLER

ZO (BO) 365 Ecology Laboratory. *Preqs: 1(0-3) F,S,Sum.* (See Botany.)

ZO 365H Honors Ecology Laboratory. *Preq: GPA 3.0 or higher; Coreq: ZO 360. Credit not allowed for both 365 and 365H 1(0-3) F.* Honors laboratory coordinated with ZO (BO) 360 lecture, provides introductory observations in laboratory and field settings. Two laboratory reports in scientific format and occasional duties outside scheduled hours are required. Optional weekend field trips out of town, housing and food at student expense.

ZO 410 Introduction to Animal Behavior. *Preqs: BS 100 and either ZO 201 or ZO 303. 3(3-0) F.* An introduction to the study of animal behavior including a treatment of physiological mechanisms and adaptive significance. Both invertebrate and vertebrate examples are studied.
BARTHALMUS

ZO (BO) 414 Cell Biology. *Preqs: CH 223, PY 212, ZO 201 or 303. 3(3-0) S.* The chemical and physical bases of cellular structure and function with emphasis on methods and interpretations.
ROBERTS

ZO 415 Cellular and Animal Physiology Laboratory. *Coreq: ZO 414 or ZO 421. 2(0-5) F,S.* An introduction to physiological techniques and experimentation. Experiments include studies of cells and examination of the functions of vertebrate organ systems.
SMITH

ZO 419 Limnology. *Preqs: BO (ZO) 360, CH 107. Credit in both ZO 419 and ZO 519 is not allowed. 4(3-3) F.* Structure and function of lakes and ponds, including physical, chemical and biological controls of productivity and species composition of aquatic plants and animals, and effects of pollution on water quality. One local weekend field trip is required.
MOZLEY

ZO (FW) 420 Fishery Science. *Preqs: ZO 201 or 303; ZO 360. 3(2-2) F.* (See Fisheries and Wildlife Sciences.)

ZO 421 Principles of Physiology. *Preqs: CH 223, PY 212, ZO 201 or 303. 3(3-0) F,S,Sum.* A comprehensive survey of the processes involved in the function of specialized cells, tissues and organ systems. Emphasis on basic concepts with orientation toward mammalian and human systems.
SMITH, UNDERWOOD

ZO (ENT) 425 General Entomology. *Preq: ZO 201 or equivalent. 3(2-3) F,Sum.* (See Entomology.)

ZO (FW) 430 Fisheries and Wildlife Administration. *Preqs: Political science course and either FW (ZO) 420 or FW (ZO) 353; advanced undergraduate or graduate standing. 3(3-0) S.* (See Fisheries and Wildlife Sciences.)

ZO 441 Biology of Fishes. *Preqs: ZO (BO) 360. 3(3-0) F.* Behavior, evolution, physiology and ecology of fishes, emphasizing their adaptations for life in streams, lakes, and oceans.
J. MILLER

ZO 442 Biology of Fishes Laboratory. *Preq: BO (ZO) 360; Coreqs: ZO 441. 1(0-3) F.* Field and laboratory exercises with the common fish species and communities of North Carolina. Field trips to local streams and lakes plus weekend trips to coastal, estuarine, and mountain habitats.
J. MILLER

ZO 450 Evolutionary Biology. *Preq: BS 100; Coreq: GN 411. 3(3-0) F.* Principles and patterns of organic evolution. Origin of life, patterns of genetic variability within populations; adaptations, natural selection, and the formation of species. The living world as an historical process governed by diverse principles of organization.
REAL

ZO 460 Aquatic Natural History Laboratory. *Preqs: BS 100 & two BO and/or ZO courses. 2(0-6) S.* Field and laboratory study of common freshwater organisms other than fish and birds. Emphasis on taxonomy of orders and some families, and adaptations of structure and behavior to aquatic environments. Effect of pollution, conservation approaches and aquarium culture. Several weekend field trips required.
MOZLEY

ZO 480 Laboratory Techniques in Cellular Biology. *Preq: ZO 415, CH 223. 3(0-6) S.* Selected laboratory techniques utilized in modern biological research including immunochemistry, tissue culture, microscopy, and the detection and isolation of recombinant proteins expressed in bacteria.
D. MILLER

ZO 490 Special Topics in Zoology. *Preq: Twelve hours ZO. 1-3 F,S,Sum.* Directed individual investigation of a particular topic in zoology, accompanied by a review of the pertinent literature.

Selected 500-Level Courses Open To Advanced Undergraduates

ZO 501 Ornithology. *Preqs: BO (ZO) 360; ZO 201 or ZO 303. 3(2-3) F.*

ZO (PHY) 503 General Physiology I. *Preq: Sr. or grad. standing. 3(3-0) F.*

ZO (PHY) 504 General Physiology II. *Preq: Sr. or grad. standing. 3(3-0) S.*

ZO (ENT) 509 Ecology of Stream Invertebrates. *Preqs: ZO 201 or 302, BO (ZO) 360 or equivalent. 4(2-6) Alt. S.*

ZO 510 Animal Behavior Research Techniques. *Preqs: ZO 410 or grad. standing in ZO, ST 311 or equivalent. 3(1-5) S.*

ZO 512 Animal Symbiosis. *Preq: 12 hrs. of biology and zoology. 3(3-0) Alt. S.*

ZO (PHY) 513 Comparative Physiology. *Preq: ZO 421 or CI. 4(3-3) S.*

ZO (FW) 515 Growth and Reproduction of Fishes. *Preqs. or Coreqs: GN 411, ZO 420, 421, 441. 3(2-3) S.*

ZO (MEA) 520 Principles of Biological Oceanography. *Preqs: BS 100 and either BO (ZO) 360 or grad. standing. 3 (3-0) S.*

ZO (PO) 524 Comparative Endocrinology. *Preq: ZO 421 or equivalent. 4(3-3) S.*

ZO (GN) 532 Biological Effects of Radiations. *Preq: BS 100 or GN 301 or CI. 3(3-0) S.*

ZO (GN) 540 Evolution. *Preq: Nine credits in biological sciences. 3(3-0) S.*

ZO 542 Herpetology. *Preqs: ZO 303 or ZO 323, ZO 421. 3(2-3) S, even yrs.*

ZO 544 Mammalogy. *Preq: ZO 323 or ZO 303. 4(3-3) F.*

ZO (FW) 553 Principles of Wildlife Science. *Preq: ZO (BO) 360. 3(2-3) F.*

ZO (MB) 555 Protozoology. *Preq: CI. 4(2-6) S, odd yrs.*

ZO (BO) 560 Principles of Ecology. *Preq: Three semesters of college-level biology courses. 4(3-3) F.*

ZO 581 Helminthology. *Preqs: ZO 303 or ZO 323, ZO 315 or equivalent. 4(2-4) F, odd yrs.*

ZO (ENT) 582 Medical and Veterinary Entomology. *Preqs: ENT 312 or 425 and ZO 315 or equivalent 3(2-3) Alt. S.*

ZO (FW) 586 Aquaculture I. *Preqs: ZO (BO) 360, sr. or grad. standing. 3(3-0) F.*

ZO (FW) 587 Aquaculture I Laboratory. *Preqs: ZO (BO) 360, sr. or grad. standing; Coreq: ZO 586. 1(0-3) F.*

ZO 590 Special Studies. *Preqs: Twelve hours ZO, CI. Credits arranged. F,S.*

ZO 592 Topical Problems. *Preq: CI. 1-3 F,S.*

ZO 593 Aquatic Ecology Seminar. *Preqs: Grad., PBS, or sr. standing; one course in aquatic, marine or fisheries area. 1-3 F,S.*





The University of North Carolina

The University of North Carolina is comprised of all the public institutions of higher education in North Carolina that confer degrees at the baccalaureate level or higher. The University was authorized by the State Constitution in 1776, and it was chartered in 1789 by the General Assembly. The University of North Carolina opened its doors to students at Chapel Hill in 1795. Thereafter, beginning in the latter part of the nineteenth century, the General Assembly of North Carolina has established and supported fifteen other public senior institutions in keeping with Article IX, Section 8, of the Constitution of North Carolina which provides that the "General Assembly shall maintain a public system of higher education, comprising The University of North Carolina and such other institutions of higher education as the General Assembly may deem wise."

By 1969, The University of North Carolina included six constituent institutions, governed by a single board of trustees. This multi-campus university had its beginnings in legislation enacted in 1931 that defined The University of North Carolina to include The University of North Carolina at Chapel Hill, North Carolina State University at Raleigh, and University of North Carolina at Greensboro. In the 1960's three additional campuses were added: The University of North Carolina at Charlotte, The University of North Carolina at Asheville, and The University of North Carolina at Wilmington.

Beginning in 1877, the General Assembly of North Carolina established or acquired ten additional separately governed state-supported senior institutions of higher education. They are: Appalachian State University, East Carolina University, Elizabeth City State University, Fayetteville State University, North Carolina Agricultural and Technical State University, North Carolina Central University, North Carolina School of the Arts, Pembroke State University, Western Carolina University, and Winston-Salem State University. Then, in 1971, the General Assembly redefined The University of North Carolina, and under the terms of that legislation all sixteen public senior institutions became constituent institutions of The University of North Carolina.

The constitutionally authorized Board of Trustees of the six-campus University of North Carolina was designated the Board of Governors; and this body is by law The University of North Carolina. The Board of Governors consists of thirty-two members elected by the North Carolina General Assembly, and it is charged with "the general determination, control, supervision, management, and governance of all affairs of the constituent institutions." The chief executive officer of the university is the president.

Each constituent institution of The University has its own faculty and student body. The chief administrative officer of each institution is the chancellor, and the chancellors are responsible to the President.

Each constituent institution also has a board of trustees composed of thirteen members: eight elected by the Board of Governors, four appointed by the Governor, and the elected president of the student body ex officio. (The School of the Arts has two additional ex officio trustees.) The principal powers of these institutional boards are exercised under a delegation of authority from the Board of Governors.

BOARD OF GOVERNORS

Philip G. Carson, *Chairman*
Jacob H. Froelich, Jr., *Vice Chairman*
Mrs. Geneva Bowe, *Secretary*

Class of 1987

B. Irvin Boyle, *Charlotte*
Mrs. Teresa T. Bullock, *Shelby*
William A. Dees, Jr., *Goldsboro*
Jacob H. Froelich, Jr., *High Point*
James E. Holshouser, Jr., *Southern Pines*
William A. Johnson, *Lillington*
Robert L. Jones, *Raleigh*
E. B. Turner, *Lumberton*

Class of 1989

Geneva J. Bowe, *Murfreesboro*
Philip G. Carson, *Asheville*
Walter R. Davis, *Midland, Texas*
R. Phillip Haire, *Sylva*
Julia T. Morton, *Linville*
Asa T. Spaulding, Jr., *Durham*
David J. Whichard, II, *Greenville*
William K. Woltz, *Mount Airy*

Class of 1991

Irwin Belk, *Charlotte*
Wayne A. Corpening, *Winston-Salem*
J. Earl Danieleley, *Elon College*
Joan S. Fox, *Oxford*
John R. Jordan, Jr., *Raleigh*
Samuel H. Poole, *Southern Pines*
J. Aaron Prevost, *Hazelwood*
Louis T. Randolph, *Washington*

Class of 1993

Roderick D. Adams, *Durham*
Charles Z. Flack, Jr., *Forest City*
John A. Garwood, *Wilkesboro*
Reginald F. McCoy, *Laurinburg*
Mrs. Martha F. McNair, *Winston-Salem*
D. Samuel Neill, *Hendersonville*
Maceo A. Sloan, *Durham*
Ms. Ruth D. Woods, *Lumberton*

GENERAL ADMINISTRATION

C. D. Spangler, Jr., B.S., M.B.A., D.H.L., LL.D.—President
Raymond H. Dawson, B.A., M.A., Ph.D.—Vice President—Academic Affairs
Roy Carroll, B.A., M.A., Ph.D.—Vice President—Planning
Lloyd V. Hackley, B.A., Ph.D.—Vice President—Student Services and Special Programs
L. Felix Joyner, A.B.—Vice President—Finance
Jasper D. Memory, B.S., Ph.D.—Vice President—Research and Public Service
Wyndham Robertson, A.B.—Acting Vice President—Communications
Jay M. Robinson, B.S., M.A., Ed.D.—Vice President—Public Affairs
John P. Kennedy, Jr., S.B., B.A., M.A., J.D.—Secretary of the University
Richard H. Robinson, Jr., A.B., LL.B.—Assistant to the President
John W. Dunlop, B.A.—Director, The University of North Carolina Center for Public Television

North Carolina State University

HISTORICAL SKETCH

On March 7, 1887, the North Carolina General Assembly passed the act which authorized the establishment of the North Carolina College of Agriculture and Mechanic Arts. The Watauga Club of Raleigh and the statewide farmers' movement had convinced the legislature of the need to transfer the funds received by the state under the provisions of the Morrill Land-Grant Act of 1862 from the University of North Carolina in Chapel Hill to a new land-grant college in Raleigh. The cornerstone of A. and M. College was laid in August, 1888, and its doors were officially opened in October 3, 1889.

Alexander Q. Holladay, the college's first president (1889-1899), and a faculty of five offered courses in agriculture, horticulture, pure and agricultural chemistry, English, bookkeeping, history, mathematics, physics, practical mechanics, and military science. The first freshman class numbered about fifty students. By the end of the institution's first decade the resident enrollment had reached 300.

During the administration of **George T. Winston** (1899-1908) a new curriculum in textiles was developed and normal courses were offered in the summer for public school teachers, both men and women. The Agricultural Extension Service was established during the administration of **Daniel H. Hill** (1908-1916) and enrollment grew to more than 700. In 1917, during the administration of **Wallace C. Riddick** (1916-1923), the institution's name was changed to North Carolina State College of Agriculture and Engineering. The introduction of the word engineering was intended to reflect the increasing emphasis on the professional and theoretical as well as the practical aspects of technical education.

In 1923 a major reorganization of the administration of the college was begun, and President Riddick resigned to become the first dean of the new School of Engineering. **Eugene Clyde Brooks** (1923-1934), the fifth president of State College, continued the reorganization with the creation of the School of Agriculture (later renamed the School of Agriculture and Forestry), the School of Science and Business, the School of Education, the School of Textiles, and the Graduate School. Resident enrollment rose to nearly 2000 in 1929 before the Depression caused a drop to approximately 1,500 in 1933. The first women graduates of State College received their degrees in 1927.

In the midst of the Depression the General Assembly of 1931 attempted to promote economy and to prevent unnecessary duplication among the three leading state institutions of higher education by establishing a single consolidated administration for the University of North Carolina in Chapel Hill, North Carolina State College of Agriculture and Engineering, and North Carolina College for Women in Greensboro. Dr. Frank Porter Graham, president of the University of North Carolina, was elected president of the consolidated university, and Dr. Brooks, with the title of vice president, continued as chief administrative officer at State College. Among the consequences of consolidation were the phasing out of the School of Engineering at Chapel Hill and the School of Science and Business at Raleigh. A general college, later called the Basic Division, was

established to provide two years of basic courses in humanities, social sciences, and natural sciences as a foundation for students in the various degree-granting technical and professional schools.

Colonel **John W. Harrelson** (1934-1953), Class of '09, was the first alumnus to become administrative head of State College. Under the consolidated organization his title was Dean of Administration; later it was changed to Chancellor. During Harrelson's administration the institution experienced the beginning of extraordinary growth in the aftermath of World War II. Two new schools were established: the School of Design and the School of Forestry. A multi-million dollar expansion program was completed during the administration of **Carey H. Bostian** (1953-1959), and the program of student activities was greatly enlarged, as the enrollment passed 5,000.

The faculty and student population more than doubled during the administration of **John T. Caldwell** (1959-1975) and another new school was organized: the School of Physical Sciences and Applied Mathematics (now Physical and Mathematical Sciences). The School of General Studies, the successor to the Basic Division, was renamed the School of Liberal Arts. The name Liberal Arts was adopted when the school was authorized to offer a full range of bachelor's and master's degree programs in the humanities and social sciences. The name of the institution itself was changed in 1965 to North Carolina State University, signifying its new role as a comprehensive university.

NCSU's enrollment passed 20,000 during the administration of Chancellor Joab L. Thomas (1976-1981). The School of Veterinary Medicine was established, the name of the School of Liberal Arts was changed to School of Humanities and Social Sciences, and North Carolina State University was recognized as one of two major research universities within the statewide University of North Carolina.

Bruce R. Poulton became Chancellor in the fall of 1982 as NCSU's tenth chief administrative officer.

ROLE AND MISSION OF NORTH CAROLINA STATE UNIVERSITY*

North Carolina State University at Raleigh is one of the sixteen institutions that comprise The University of North Carolina. Within the statewide University it is classified as one of the two major research universities, offering degrees at the baccalaureate, master's and doctoral levels. It is one of the state's two land-grant institutions, and it has responsibility for the academic, research, and public service programs in areas of primary importance to the state's economy.

The University is organized in ten schools, including Agriculture and Life Sciences, Design, Education, Engineering, Forest Resources, Humanities and Social Sciences, Physical and Mathematical Sciences, Textiles, and Veterinary Medicine. The Graduate School serves the vital role of coordinating the research and graduate programs. North Carolina State University has state-wide respon-

*Approved by the NCSU Board of Trustees on March 8, 1984.

sibility for serving the major technical and technological segments of the state's economy. It also serves the special academic needs of the adult population in the Research Triangle area.

The special mission of North Carolina State University in the state's system of higher education stems from its land-grant origins. The land-grant philosophy is to maintain a people's university that is service oriented and maintains a direct relevance to the development of the people of the state, their economy, their environment, and the competence of their educational, social and governmental institutions.

North Carolina State University has statutory responsibility for advancing the major technologies of man and the sciences and arts on which they are based through teaching, research and public service, and for cultivating the aesthetic and social understandings which ensure the quality of life that technology helps make possible in a free society. Even though it is committed to function at high levels of intellectual sophistication in its research and public service, this University is also fully and continuously committed to high quality instruction at the undergraduate level.

Since its founding in 1887 as the state's land-grant campus, North Carolina State University has fulfilled a unique and critical intellectual role in the well-being of North Carolina and indeed the nation. Its thrust in the major technologies and basic sciences constitutes an essential service to the economic, social, and institutional life of the state.

Although North Carolina State University's performance in teaching, research, and extension programs is statewide in its geographical reach, it has a special relationship with the metropolitan area of the capital city, with state government, and with the Research Triangle in several of its programs. North Carolina State University holds that knowledge is powerful and precious. Genuine universities are knowledge centers. The modern university is useful in proportion to the quality of intellects of its faculty and their sense of responsibility to the community and to the manner in which these intellects are supported. Therefore, North Carolina State University must maintain the size of undergraduate and graduate enrollment and the breadth of curricula that are necessary to maintain a critical and relevant mass of intellectual endeavor.

At the apex of each major field of science and technology, as well as in certain fields of education and the social sciences, major research programs staffed by distinguished scholars have been necessarily interlinked with academic programs, especially at the doctoral level. Graduate study and scholarly research have not only expanded the frontiers of knowledge but they have provided training for college and university faculties, both public and private, throughout the state.

The land-grant mission in the development of North Carolina State University, however, has been best reflected by the insistence that knowledge acquired through research and teaching be utilized for the economic and social benefit of the people. Therefore, the University has throughout its history maintained aggressive programs of extension, adult and continuing education, and public service designed to put acquired knowledge to the immediate service of the general public. North Carolina's agricultural, industrial and urban life is based on modern science and technology and as such it depends heavily on dedicated,

imaginative, and effective research to maintain its momentum. A large proportion of the public supported research that sustains the state's economic health is performed by North Carolina State University. Large and sophisticated research programs are conducted in the Schools of Agriculture and Life Sciences, Engineering, Forest Resources, Physical and Mathematical Sciences, Textiles and Veterinary Medicine. In addition, there are relatively new programs in such inter-school areas as Water Resources, Marine Sciences, Operations Research and Urban Affairs.

Regardless of the field, research and scholarship are regarded as necessary and integral parts of the university endeavor. This is especially so if graduate programs are offered, for a good research program is a sine qua non for good graduate education. The intimate link between teaching and research makes it possible for the teaching faculty to continue their own education and maintain positions at the leading edge of scientific progress through research which involves their graduate students.

The tradition of extension and public service activities at North Carolina State University rests on the solid legislative mandate to be responsive to the continuing education and skill needs of our citizens. This legislative mandate is continually renewed and strengthened by both federal and state legislative bodies. Initial extension programs were directed to the agricultural sector. The University and the U.S. Department of Agriculture signed a memorandum of agreement on July 1, 1909, to conduct cooperative farm demonstration work in the state of North Carolina.

A Division of Continuing Education, now called the Division of Lifelong Education, was established in 1923 and is now a unit of University Extension which is the institution's major organizational structure to provide for the application of knowledge and technical assistance programs to meet the lifelong education needs of the public. In 1976 the Jane S. McKimmon Center for Extension and Lifelong Education was opened and serves as the hub for university extension and public service programs.

The School of Engineering established the Industrial Extension Service during the mid-1950's to aid in the development of the state's economy through experimental work and the application of technology to improve industrial and manufacturing processes.

The School of Textiles received state legislative support for extension activities in 1969.

Congress passed the National Sea Grant Act in 1966 built on the tradition of the earlier Land-Grant Act. A research and extension program has been developed with specific focus on the ocean, shoreline, and coastal zone. The North Carolina General Assembly endorsed this program in 1969 with state matching funds.

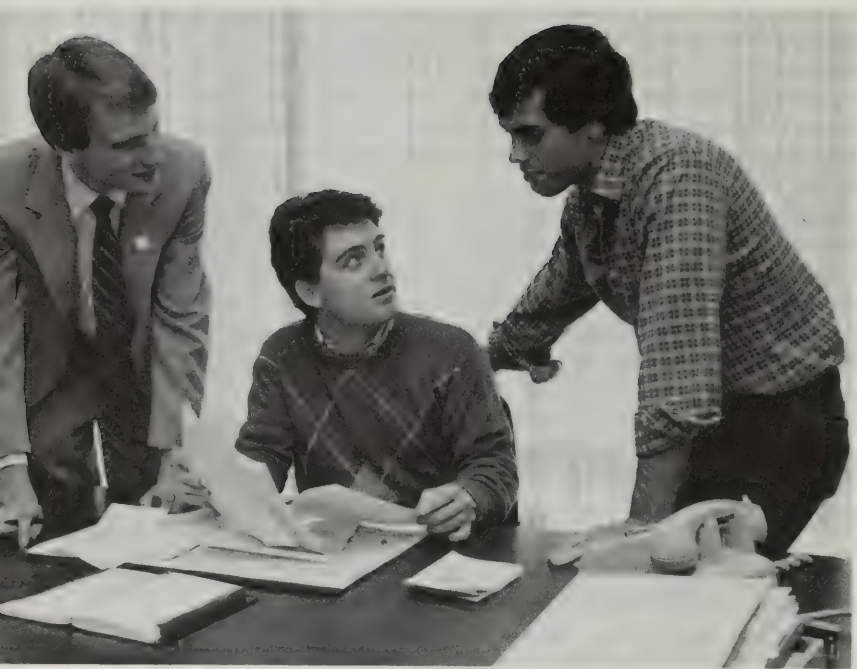
The major schools of North Carolina State University are expressly designed to develop and diffuse knowledge in the fields most important to the well-being of the state, including Agriculture and Life Sciences, Design, Education, Engineering, Forest Resources, Textiles, and Veterinary Medicine, and in basic supporting areas of Physical and Mathematical Sciences, and Humanities and Social Sciences. The tenth School, the Graduate School, promotes excellence in all graduate programs across the University.

BOARD OF TRUSTEES

James A. Hackney, *Washington, Chairman*
Edward I. Weisinger, *Charlotte, Vice Chairman*
John N. Gregg, *Valley Forge, Secretary*
Wallace J. Conner, *Newport*
Alan T. Dickson, *Charlotte*
Troy A. Doby, Sr., *Raleigh*
Daniel C. Gunter, *Gastonia*
Jack P. Jordan, *Mt. Gilead*
Elizabeth B. Lee, *Lumberton*
Clarence Lightner, *Raleigh*
Gerald H. Long, *Winston-Salem*
T. Baxter Williams, Jr., *Currituck*
Gary V. Mauney, *Matthews, President, NCSU Student Government,*

ADMINISTRATIVE COUNCIL

Bruce R. Poulton, B.S., M.S., Ph.D., *Chancellor*
Nash N. Winstead, B.S., M.S., Ph.D., *Provost and Vice Chancellor*
William L. Turner, B.S., M.S., D.P.A., *Vice Chancellor for Extension and Public Service*
George L. Worsley, B.S., *Vice Chancellor for Finance and Business*
John T. Kanipe, Jr., B.S., M.Ed., *Vice Chancellor for Development*
Franklin D. Hart, B.S., M.S., Ph.D., *Vice Chancellor for Research*
Debra W. Stewart, B.A., M.A., Ph.D., *Interim Dean of The Graduate School*
Thomas H. Stafford, Jr., A.B., M.S., Ph.D., *Vice Chancellor for Student Affairs*
Durwood F. Bateman, B.S., M.S., Ph.D., *Dean, School of Agriculture and Life Sciences*
Claude E. McKinney, B.A., *Dean, School of Design*
Carl J. Dolce, A.B., M.Ed., Ed.D., *Dean, School of Education*
Larry K. Monteith, B.S., M.S., Ph.D., *Dean, School of Engineering*
Eric L. Ellwood, B.Sc., M.Sc., Ph.D., *Dean, School of Forest Resources*
William B. Toole, III, A.B., M.A., Ph.D., *Dean, School of Humanities and Social Sciences*
Garrett Briggs, B.S., M.S., Ph.D., *Dean, School of Physical and Mathematical Sciences*
Dame S. Hamby, B.S., *Dean, School of Textiles*
Terrence M. Curtin, B.S., D.V.M., M.S., Ph.D., *Dean, School of Veterinary Medicine*
James T. Valvano, B.A., *Director of Athletics*
Becky R. French, B.S., J.D., *University Counsel*
William H. Simpson, B.S., M.A., *Secretary of The University*
James E. Smallwood, B.S., M.S., D.V.M., *Chairman, Faculty Senate*



Top: NCSU student government leaders confer. Left to right are Student Senate President Walter N. Perry, Student Body President Gary Mauney and Attorney General John Nunnally.



Right: Discussing plans for an upcoming meeting of the NCSU Faculty Senate are senate leaders (left to right) Dr. Thomas L. Honeycutt, vice chair; Dr. Elizabeth M. Suval, secretary; and Dr. James E. Smallwood, chair.

TEACHING, RESEARCH, AND EXTENSION FACULTY AND OTHER ACADEMIC PERSONNEL

- Aanstoos, James Vincent*, Adj. Instr. in Elect. & Comp. Engr. B.S., M.E.E., Rice Univ.
- Abbate, Angelo Rudy*, Assoc. Prof. of Land. Arch. B.F.A., Pratt Inst.; M.L.A., Univ. of Penn.
- Abbott, John Parsons*, Lib. and Head For. Res. Lib. B.S., M.S., Col. State Univ.; M.L.S., Fla. State Univ.
- Abbott, Lisa T.*, Lib. & Doc. Lib. B.A., M.L.S., Fla. State Univ.
- Abdullah, Wanda C.*, Asst. Dir. of Fin. Aid. B.A., Shaw Univ.
- Abrams, Charlie Frank, Jr.*, Prof. of Biol. & Agri. Eng. B.S., M.S., Ph.D., N.C. State Univ.
- Accatino, Primo*, Adj. Prof. of Hort. Sci. M.S., Ph.D., Univ. of Wis.
- Adams, David A.*, Assoc. Prof. of For. & Univ. Studies. B.S., M.S., Ph.D., N.C. State Univ.
- Adams, Samuel S.*, Res. Asst. in Ind. Engr. B.S., E. Central Okla. State Univ.
- Adams, William McChesney*, Prof. of Food Ani. & Equine Med. & Assoc. Dean & Dir., Vet. Med. Serv. B.S., Penn. State Univ.; V.M.D., M.Med.Sci., Univ. of Penn.
- Adler, William*, Asst. Prof. of Rel. B.A., Franklin & Marshall Coll.; M.Div., Yale Univ.; Ph.D., Univ. of Penn.
- Afify, Elsayed M.*, Prof. of Mech. & Aero. Engr. B.S.M.E., M.S.M.E., Univ. of Alexandria; Ph.D., Univ. of Mich.
- Agrawal, Dharma Prakash*, Prof. of Elect. & Comp. Engr. B.E., Ravishankar Univ.; M.E., Univ. of Roorkee; D.Sc., Federal Inst. of Tech.
- Ahmad, Shuaib H.*, Assoc. Prof. of Civ. Engr. B.S.E., Univ. of Karachi; M.S., Kan. State Univ.; Ph.D., Univ. of Ill. at Chicago.
- Ahuja, Vijay*, Adj. Assoc. Prof. of Comp. Sci. B.S., Punjab Engr. Coll.; M.S., Ph.D., Univ. of N.C. at Chapel Hill
- Alchediak, James*, Lect. in Speech-Comm. B.A., Loyola Univ.; M.A., Ohio Univ.
- Alder, Ruth Ayendez*, Assoc. Prof. of For. Lang. & Lit. B.M., Westminster Choir College; M.A. Ph.D., Univ. of Pitts.
- Alexander, Samuel Thomas*, Asst. Prof. of Elect. & Comp. Engr. B.S., Tenn. Tech. Univ.; M.S., Univ. of Tenn.; Ph.D., N.C. State Univ.
- Alexander, Winsor Edward*, Prof. of Elect. & Comp. Engr. B.S., N.C. A&T State Univ.; M.S., Ph.D., Univ. of New Mex.
- Allen, Benjamin B.*, Asst. Dir. of Alumni Rel. B.A., N.C. State Univ.
- Allen, Brenda Foster*, Leadership Dev. Spec., Agri. Ext. Serv. B.S., Va. State Coll.; M.S., N.C. State Univ.
- Allen, Claudia G.*, Lect. in Econ. & Bus. B.A., M.A., J.D., State Univ. of New York at Buffalo.
- Allen, Howard Lee*, Asst. Prof. of For. & Soil Sci. & Dir., For. Fertilization Coop. B.S., M.S., Univ. of Maine at Orono; Ph.D., N.C. State Univ.
- Allen, Hunt M.*, Ext. Spec. in Text. Ext. B.S., Averette Coll.; M.Ed., Lynchburg Coll.
- Allen, Steven G.*, Assoc. Prof. of Econ. & Bus. B.A., M.A., Mich. State Univ.; Ph.D., Harvard Univ.
- Allison, Beecher Carl*, Ext. Area Live. Spec., Ani. Sci. B.S., M.S., N.C. State Univ.
- Allison, Richard Coffey*, Ext. Assoc. Prof. of Wood and Paper Sci. B.S., M.F. Penn. State Univ.
- Almekinders, Sally Van Metre*, Asst. Prof. of Phys. Ed. B.Ed., M.Ed., Univ. of Miami.
- Alonso, Silvia Gonzalez-Quevedo*, Assoc. Prof. of For. Lang. & Lit. B.S., Escuela de Maestros Primarios; M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Alvarez, Raul Eduardo*, Prof. & Dir., Off-Campus Engr. Stud., UNC-Asheville. Dipl. in C.E., Univ. of Buenos Aires; M.S., N.C. State Univ.
- Alvis, Sandra R.*, Lect. in Econ. & Bus. B.S., M.S., No Mich. Univ.
- Ambrose, John Thomas*, Assoc. Prof. of Entom. B.A., Geo. Mason College, Univ. of Va.; M.S., Ph.D., Cornell Univ.
- Ambrose, Richard J.*, Adj. Prof. of Text. Chem. B.S., Bowling Green State Univ.; Ph.D., Univ. of Akron.
- Amein, Michael*, Prof. of Civ. Engr. & Mar., Earth & Atmos. Sci. B.S., Stanford Univ.; M.S., Ph.D., Cornell Univ.
- Amerson, Henry Van*, Assoc. Prof. of For. & Bot. B.A., Univ. of N.C. at Chapel Hill; M.A., East Carolina Univ.; Ph.D., N.C. State Univ.
- Amoozegar-Fard, Azizolah*, Asst. Prof. of Soil Sci. B.S., Ahwaz Agri. Coll.; M.S., Ph.D., Univ. of Ariz.
- Anderson, Charles E.*, Prof. of Mar., Earth, & Atmos. Sci. B.S., Lincoln Univ.; M.S., Polytech. Inst. of Brooklyn; Ph.D., Mass. Inst. of Tech.
- Anderson, Charles Eugene*, Prof. of Bot. B.S., M.S., Ph.D., Purdue Univ.
- Anderson, James M.*, Asst. Prof. (USDA) of Crop Sci. B.S., Univ. of Calif. at L.A.; Ph.D., Purdue Univ.
- Anderson, John R., Jr.*, Assoc. Prof. of Crop Sci. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of Ill.
- Anderson, Kevin L.*, Asst. Prof. of Food Ani. & Equine Med. B.S., D.V.M., Univ. of Minn.; M.S.; Ph.D., Univ. of Ill. at Urbana.
- Anderson, Marshall W.*, Adj. Prof. of Biomath. B.S., Emory & Henry Coll.; Ph.D., Univ. of Tenn., Knoxville.
- Anderson, Norman Dean*, Prof. of Sci. Ed. A.B., M.A., Univ. of Iowa; Ph.D., Ohio State Univ.
- Anderson, Ronald F.*, Adj. Asst. Prof. of Coun. Ed. B.A., M.A., Ph.D., Univ. of Fl.
- Anderson, Ruth Diana*, Assoc. Prof. of Speech-Comm. B.A., Geneva Coll.; M.A., Kent State Univ.; Ph.D., Univ. of Ore.
- Andrews, Grover J.*, Assoc. Vice Chan. for Univ. Ext. & Pub. Serv. B.A., M.A., Geo. Peabody College; Ed.D., N.C. State Univ.
- Andrews, John Carl*, Asst. Dir., Thompson Theatre. B.A., Purdue Univ.
- Antonelli, Douglas Charles*, Adj. Assoc. Prof. of Ind. Engr. B.S., N. Dakota State; M.S., Iowa State Univ.; Ph.D., N.C. State Univ.
- Antony, Louise M.*, Asst. Prof. of Phil. B.A., Syracuse Univ.; Ph.D., Harvard Univ.
- Apperson, Charles S.*, Assoc. Prof. of Entom. A.B., M.S., Humboldt State Coll.; Ph.D., Univ. of Calif. at Riverside.
- Apple, Jay Lawrence*, Prof. of Plant Path. & Gen. and Assoc. Dir. of Res. for Intnat'l Ag., Ag. and Life Sci., Coordinator of Intnat'l Programs for NCSU; B.S., M.S., Ph.D., N.C. State Univ.
- Archie, Joseph P., Jr.*, Adj. Assoc. Prof. of Mech. & Aero. Engr. B.S., M.S., Ph.D., N.C. State Univ.; M.D., Univ. of N.C. at Chapel Hill.
- Arends, James Jay*, Assoc. Prof. of Entom. Microbiol., Path. & Parasit. B.A., Wartburg Coll.; M.S., Ph.D., Okla. State Univ.
- Argenzio, Robert A.*, Prof. of Anat., Physiol. Sci. and Radiol. B.S., M.S., Colo. State Univ.; Ph.D., Cornell Univ.
- Armstrong, Frank Bradley*, Univ. Prof. of Biochem. & Gen., Dir., NCSU Biotech. Prog. B.S., M.A., Univ. of Tex.; Ph.D., Univ. of Calif. at Berkeley.

- Armstrong, Jeffrey D.*, Asst. Prof. of Ani. Sci. B.S., Murray State Univ.; M.S., Ph.D., N.C. State Univ.
- Armstrong, Pamela Jane*, Asst. Prof. of Comp. Ani. & Special Spec. Med. D.V.M., Ontario Vet. Coll.
- Armstrong, Robert N.*, Adj. Assoc. Prof. of Mech. & Aero. Engr. B.S., Duke Univ.; M.S., Univ. of Penn.; Ph.D., Duke Univ.
- Arnold, John Floyd*, Assoc. Prof. of Curr. & Instr. B.S., Wash. and Lee Univ.; Ph.D., Univ. of Conn.
- Aronson, Arthur L.*, Prof. & Head of Anat., Physiol. Sci. & Radiol. B.S., D.V.M., Univ. of Minn.; M.S., Cornell Univ.; Ph.D., Univ. of Minn.
- Artis, Frankie B.*, Acad. Facilitator, Acad. Skills Prog. B.A., N. C. State Univ.
- Arya, Satya Pal Singh*, Prof. of Meteorol. B.Sc., Meerut Coll. B.E., M.E., Univ. of Roorkee; Ph.D., Colo. State Univ.
- Ashanti, F. Charles*, Counselor, Stud. Aff. B.A., M.A., N.C. Central Univ.; Ph.D., Univ. of Pitt.
- Askari, Farid M.*, Res. Assoc. in Mar., Earth & Atmos. Sci. B.S., Purdue Univ.; M.S., Ohio State Univ.; Ph.D., N.C. State Univ.
- Atchley, William R.*, Prof. & Head of Gen. B.S., Eastern New Mex. Univ.; M.A., Ph.D., Univ. of Kan.
- Ater, Steven K.*, Asst. Prof. of Prod. Design B.A., Ctrl. Wash. State Univ.; M.F.A., Univ. of Ill. at Urbana.
- Atkinson, Maxine P.*, Assoc. Prof. of Soc. & Anth. B.S., Univ. of Ga.; M.A., Ga. State Univ.; Ph.D., Wash. State Univ.
- Attarian, Aram*, Lect. in Phys. Ed. B.S., West Chester State Coll.; M.A., Appalachian State Univ.
- Aubrecht, Lyn G.*, Adj. Asst. Prof. of Curr. & Instr. B.S., M.S., Ill. State Univ.; Ph.D., Ohio State Univ.
- Auciello, Orlando Hector*, Assoc. Prof. of Nuc. Engr. M.S., Ph.D., Nat'l Univ. of Cuyo.
- Auerbach, David Daniel*, Asst. Prof. of Phil. B.S., City Coll. of N.Y.; Ph.D., Mass. Inst. of Tech.
- Aurand, Leonard William*, Prof. of Food Sci. & Biochem. B.S., Penn. State Coll.; M.S., Univ. of N. Hamp.; Ph.D., Penn. State Univ.
- Austin, David Franklin*, Asst. Prof. of Phil. B.A., Univ. of Rochester; M.A., Ph.D., Univ. of Mass. at Amherst.
- Averre, Charles Wilson, III*, Prof. of Plant Path. B.S., M.S., N.C. State Univ.; Ph.D., Purdue Univ.
- Axtell, Richard Charles*, Prof. of Entom. B.S., M.S., State Univ. of N.Y. at Albany; Ph.D., Cornell Univ.
- Ayoub, Mahmoud Amin*, Prof. of Ind. Engr. B.S., Cairo Univ.; M.S., Ph.D., Tex. Tech. Univ.
- Bachelor, Jack S.*, Prof. of Entom. B.A., Miami Univ.; M.S., Ph.D., Univ. of Fla.
- Bachman, Michael Edward*, Asst. Dir. of Counseling, Div. of Stud. Aff. B.A., M.S., State Univ. of N.Y.; Ph.D., N.C. State Univ.
- Bachmann, Klaus Jurgen*, Prof. of Chem. & Mat. Sci. & Engr. D. C., Dr.R.N., Freie Univ.
- Bai, Stephen A.*, Asst. Prof. of Anat., Physiol. Sci., & Radiol. B.A., Univ. of Vt.; Ph.D., George Washington Univ.
- Bailey, Albert E.*, Inst. in Mil. Sci. B.S., Univ. of Ga.; M.A., West. Ky. Univ.
- Bailey, Jack Eugene*, Asst. Prof. of Plant Path. B.S., Stephen F. Austin Univ.; M.S., Ph.D., Mich. State Univ.
- Bailey, John Albert*, Prof. & Head of Mech. & Aero. Engr. B.Sc., Ph.D., Univ. Coll. of Swansea.
- Baines, Barbara Joan Hurst*, Prof. of Engl. B.A., M.A., Univ. of Okla.; Ph.D., Ohio Univ.
- Baird, Jack Vernon*, Ext. Prof. & Spec.-In-Charge, Soil Sci. B.Sc., M.Sc., Univ. of Neb.; Ph.D., Wash. State Univ.
- Baker, James R.*, Prof. of Entom. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of Kan.
- Baker, Richard Cornelius*, Asst. Ath. Trainer B.A., N.C. State Univ.
- Baker, Walter Donald*, Adj. Instr. in Zool. B.S., M.S., N.C. State Univ.
- Baker-Ward, Lynne Elizabeth*, Asst. Prof. of Psych. B.A., Wake Forest Univ.; M.A., Emory Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- Baldwin, Edward M.*, Asst. Women's Basketball Coach B.A., N.C. Central Univ.
- Baldwin, Harriet J.*, Lib. & Asst. Head Coll. & Acq. B.A., Boston Univ.; A.M.L.S., Univ. of Mich.
- Balik, Charles M.*, Asst. Prof. of Mat. Sci. & Engr. & Chem. Engr. B.S., Grove City Coll.; M.S., Ph.D., Case Western Reserve Univ.
- Ball, Cynthia J.*, Univ. Devel. Officer. B.A., Univ. of N.C. at Greensboro; M.B.A., Va. Commonwealth Univ.
- Ball, David Stafford*, Assoc. Prof. of Econ. B.S., Ph.D., Univ. of N.C. at Chapel Hill.
- Ball, Hershell Ray, Jr.*, Prof. of Food Sci. & Poultry Sci. B.S., M.S., Tex. A & M Univ.; Ph.D., Univ. of Mo.
- Ballas, Lawrence Michael*, Asst. Prof. of Anat., Physiol. Sci., Radiol. & Biochem. B.S., Quinipiac College; M.S., Long Island Univ.; Ph.D., Cornell Univ.
- Balinger, Walter Elmer*, Prof. of Hort. Sci. & Dept. Teach. Coord. B.S., Rutgers Univ.; M.Sc., Ph.D., Mich. State Univ.
- Ballington, James Ralph, Jr.*, Assoc. Prof. of Hort. Sci. B.S., M.S., Clemson Univ.; Ph.D., N.C. State Univ.
- Bambara, Stephen B.*, Res. Asst./Ext. Spec. in Ent. B.S., Univ. of N.C. at Chapel Hill; M.S., N.C. State Univ.
- Banker, James Roderick*, Assoc. Prof. & Asst. Dept. Head of Hist. B.A., Taylor Univ.; M.A., Boston Univ.; Ph.D., Univ. of Rochester.
- Banks-Lee, Pamela*, Asst. Prof. of Text Engr. & Sci. B.S., M.S., Ph.D., N.C. State Univ.
- Bao, Han*, Asst. Prof. of Ind. Engr. B.E., M.E., Ph.D., Univ. of New S. Wales.
- Barclay, Gwen*, Lect. in Engl. B.A., Susquehanna Univ.; M.A., Ball State Univ.
- Barker, James Albert*, Adj. Asst. Prof. of For. B.S.F., M.S.F., Univ. of Fla.; Ph.D., N.C. State Univ.
- Barker, James C.*, Ext. Prof. of Biol. & Agri. Engr. B.S., M.S., Ph.D., Univ. of Tenn.
- Barker, Jerry W.*, Dir. of Stud. Health Serv. B.S., Appalachian State Univ.; M.S., Auburn Univ.
- Barker, Kenneth Reece*, Prof. of Plant Path. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of Wis.
- Barker, Roger Lee*, Assoc. Prof. of Text. Engr. & Sci. B.S., M.S., Univ. of Tenn.; Ph.D., Clemson Univ.
- Barnes, Harold John*, Prof. of Food Ani. and Equine Med. B.S., D.V.M., Kans. State Univ.; Ph.D., Ahmadu Bello Univ. (Nigeria).
- Barney, Paul E., Jr.*, Res. Assoc. in Crop Sci. B.S., Gannon Univ.; M.S., Ph.D., Univ. of Ky.
- Barney, William P.*, Lib., Tob. Lit. Serv. B.S., Colo. State Univ.; M.S., N.C. State Univ.
- Barnhardt, Emma Lucia*, Lect. in Math. B.S., Brigham Young Univ.; M.A.T., Univ. of N.C. at Chapel Hill.
- Barnwell, Richard Walker*, Adj. Assoc. Prof. of Mech. & Aero. Engr. B.S., M.S., Auburn Univ.; Ph.D., Va. Polytech. Inst. & State Univ.
- Barraz, Gerald William*, Assoc. Prof. of Engl. B.A., Duquesne Univ.; M.A., Univ. of Pitts.
- Bartholomus, George Timothy*, Prof. of Zool. B.S., Bloomsburg State Coll.; M.S., Ph.D., Penn. State Univ.
- Barton, Charles Lincoln*, Asst. to the Dean, Text. B.S., N.C. State Univ.
- Bass, Larry*, Ext. Spec. in Hort. Sci. B.S., M.Agric., N.C. State Univ.
- Bassett, John Earl*, Prof. & Head of English. B.A., M.A., Ohio Wesleyan Univ.; Ph.D., Univ. of Rochester.
- Batchelor, Peter*, Prof. of Urban Design B.Arch., Univ. of British Columbia; M.Arch., M.City Planning, Univ. of Penn.
- Bateman, Durward Franklin*, Dean, Sch. of Agri. & Life Sci., and Prof. of Plant Path. B.S., N.C. State Univ.; M.S., Ph.D., Cornell Univ.

- Batra, Subhash K.*, Prof. of Text. Engr. & Sci. B.S., Delhi Univ.; S.M. (Text. Tech.), S.M. (Mgmt.), Mass. Inst. of Tech.; Ph.D., Rensselaer Polytech. Inst.
- Batton, George Oates*, Lect. in Mech. & Aero. Engr. B.S.M.E., N.C. State Univ.
- Batts, Hazel Marie*, Lect. in Math. B.S., M.A., E. Carolina Univ.
- Baughman, Gerald Robert*, Assoc. Prof. of Biol. & Agri. Engr. B.A., M.S., Ph.D., Ohio State Univ.
- Baumer, David Lee*, Assoc. Prof. of Econ. & Bus. B.A., Ohio Univ.; J.D., Univ. of Miami; Ph.D., Univ. of Va.
- Bayley, William Keating*, Learning Res. Spec., Design. B.P.D., N.C. State Univ.
- Beals, Allen M., Jr.*, Lect. in Econ. A.B., Elon Coll.; M.S., N.C. State Univ.
- Beasey, Douglas Buchanan*, Assoc. Radia. Protect. Officer. B.A., Transylvania Univ.; M.S., Univ. of Ky.
- Beasley, Eustace Orland*, Ext. Prof. of Biol. & Agri. Engr. B.S., M.S., N.C. State Univ.
- Bechtolt, Randall Nathan*, Lect. in Phys. Ed. B.S., Univ. of Wis. at La Crosse; M.S., Univ. of Wis. at Madison.
- Beck, Keith R.*, Assoc. Prof. of Text. Chem. B.S., Adrian Coll.; Ph.D., Purdue Univ.
- Beck, Richard Dean*, Lab. Suprv. in Chem. B.S., Calif. Polytech. State Univ.; M.S., Calif. State Univ.
- Beckham, Sonia S.*, Coord. of Judic. Prog. B.S., Western Carolina Univ.; J.D., N.C. Central Univ.
- Beckmann, Robert Lee*, Assoc. Prof. of Bot. B.A., Ph.D., Vanderbilt Univ.
- Bedair, Salah Mohamed*, Prof. of Elect. & Comp. Engr. B.S., Alexandria Univ. (Egypt); M.Sc., Ph.D., Univ. of Calif. at Berkeley.
- Beegle, Kim H.*, Res. Asst. in Microbiol., Path. & Parasit. B.S., Cornell Univ.
- Beeler, Joe Robert, Jr.*, Prof. of Mat. Sci. & Engr. & Nucl. Engr. B.S., M.S., Kansas State Univ.; Ph.D., Univ. of Kansas
- Beers, Burton Floyd*, Prof. of Hist. B.A., Hobart Coll.; M.A., Ph.D., Duke Univ.
- Beezer, Bruce Gerald*, Assoc. Prof. of Ed. Ldrshp. & Prog. Eval. B.A., M.A., Seattle Univ.; Ed.D., Univ. of Ariz.
- Beetzley, William Howard*, Prof. of Hist. B.A., Chico State Coll.; M.A., Ph.D., Univ. of Neb.
- Beitman, Donald S.*, Res. Prof. of Elect. & Comp. Engr. B.E.E., Cornell Univ.
- Belcher, Clifton B.*, Adj. Asst. Prof. of Occ. Ed. B.S., Va. Commonwealth Univ.; M.Ed., Univ. of N.C. at Chapel Hill; Ed.D., N.C. State Univ.
- Bell, Arnold S.*, Coord. of Prog. Eval., Acad. Skills Prog. B.A., N.C. State Univ.
- Bend, John Richard*, Adj. Prof. of Entom. B.S., M.S., Univ. of Manitoba (Canada); Ph.D., Sydney Univ. (Australia).
- Benevides, Marie L.*, Lab. Demonstrator in Chem. B.A., Emmanuel College; M.A., State Univ. of N.Y.
- Bengel, James Elwood*, Counselor in Stud. Aff. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- Bengston, Mary Kay Witges*, Staff Physician. B.A., M.D., Southern Ill. Univ.
- Bengtson, Neal M.*, Asst. Prof. of Comp. Sci. & Ind. Engr. B.S., N.C. State Univ.; M.S., Univ. of Ala. at Huntsville; Ph.D., Purdue Univ.
- Bennett, Saunders, C.*, Res. Asst. in Crop Sci. B.S., N.C. State Univ.
- Benson, David Michael*, Prof. of Plant Path. A.B., Earlham Coll.; M.S., Ph.D., Colo. State Univ.
- Benson, Frederick Land*, Adj. Lect. in Comp. Sci.
- Benson, Geoffrey Alan*, Assoc. Prof. of Econ. & Bus. B.Sc., Univ. of Leeds (England); M.S., Ph.D., Penn. State Univ.
- Benson, Ray Braman, Jr.*, Prof. of Metallurg. Engr. B.S., M.S., Ph.D., Univ. of Calif. at Berkeley.
- Bent, Henry Albert*, Prof. of Chem. A.B., Oberlin Coll.; Ph.D., Univ. of Calif. at Berkeley.
- Bentley, Peter John*, Prof. of Anat., Physiol. Sci. & Radiol. B.S., Ph.D., Univ. of West. Australia.
- Berardinelli, Paula K.*, Health Ed., Stud. Aff. B.S., M.S., Penn. State Univ.
- Bereman, Robert Deane*, Prof. of Chem. & Assoc. Dean for Academic Affairs, Sch. of Phys. and Math. Sciences. B.S., Butler Univ.; Ph.D., Mich. State Univ.
- Berens, Alan Robert*, Adj. Prof. of Chem. Engr. A.B., M.S., Harvard Univ.; Ph.D., Case Inst. of Tech.
- Berenson, Sarah B.*, Res. Assoc. & Ctr. Coord., Ctr. for Res. Ed. B.S., Univ. of Mass.; M.S., Western Conn. State Univ.; Ph.D., Fla. State Univ.
- Berger, Knute E.*, Adj. Prof. of Text. Engr. & Sci. B.S., Univ. of Wash.; M.D., Yale Univ.
- Berger, Roger Lee*, Assoc. Prof. of Statistics. B.A., Univ. of Kansas; M.S., Ph.D., Purdue Univ.
- Berkhoff, Herman A.*, Prof. of Microbiol., Path. and Parasit. B.S., D.V.M., Univ. of Chile; Ph.D., Cornell Univ.
- Berkstresser, Gordon A., III*, Prof. & Head of Text. Mgmt. & Tech. B.S., N.C. State Univ.; M.B.A., Bernard M. Baruch College; Ph.D., City Univ. of N.Y.
- Berle, Andrea Lynn*, Asst. Prof. of Phys. Ed. B.S., M.Ed., E. Carolina Univ.
- Bernhard, Richard Harold*, Prof. of Ind. Engr. & Econ. & Bus. B.M.E., Cornell Univ.; M.S., Mass. Inst. of Tech.; Ph.D., Cornell Univ.
- Bernhole, Jerzy*, Assoc. Prof. of Phys. B.S., Ph.D., Univ. of Lund (Sweden).
- Berry, Hardy Duane*, Asst. Vice Chan. for Univ. Comm., Chan. Off. & Univ. Rel. B.S. (Hist. & Gov.), B.S. (Journalism), Kan. State Univ.
- Berschner, Helen M.*, Asst. Prof. of Anat., Physiol. Sci. & Radiol. B.S., Univ. of Wisc. at River Falls; DVM, Iowa St. Univ., Ames.
- Bertha, Joseph W.*, Lect. in Econ. & Bus. B.S., M.B.A., Penn. State Univ.
- Best-Nichols, Barbara*, Lib. and Head of Text. Lib. B.S., M.L.S., N.C. Central Univ.
- Bettis, Jerry Lamont, Sr.*, Inst. in For. B.S., Univ. of Idaho.
- Betts, Charles William*, Prof. of Comp. Ani. & Special Spec. Med. B.S., D.V.M., Colo. State Univ.
- Betts, Leonidas Judd, Jr.*, Assoc. Prof. of Engl. A.B., Univ. of N.C. at Chapel Hill; M.Ed., Ed.D., Duke Univ.
- Beute, Marvin Kenneth*, Prof. of Plant Path. A.B., Calvin Coll.; Ph.D., Mich. State Univ.
- Bevis, Michael G.*, Asst. Prof. of Mar., Earth & Atmos. Sci. B.S., Birmingham Univ. (England). M.S., Ph.D., Cornell Univ.
- Bewley, Glenn Carl*, Prof. of Gen. B.S., M.A., Miami Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- Bhattacharyya, Bibhuti Bhushan*, Prof. of Stat. B.Sc., Presidency College; M.Sc., Calcutta Univ. (India); Ph.D., London School of Econ.
- Bhattacharyya, Helen Tang*, Adj. Assoc. Prof. of Stat. A.B., Swarthmore Coll.; M.S., N.C. State Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- Bickel, William G.*, Instr. in Military Sci. B.A., Shaw Univ.
- Bicknell, Robert Newton*, Res. Assoc. & Coord. of MBE Fac. B.S., Penn. State Univ.; Ph.D., N.C. State Univ.
- Bierty, Darryl W.*, Asst. Vice Chan. for Fin. B.S., M.S., Penn. State Univ.
- Bilbro, Griff L.*, Res. Assoc. in Elect. & Comp. Engr. B.S., Case Western Res. Univ.; M.S., Ph.D., Univ. of Ill.
- Bilderback, Theodore Eugene*, Assoc. Prof. of Hort. Sci. B.S.E., M.S., Kan. State Teachers' Coll.; Ph.D., Kan. State Univ.

- Bingham, William Louis*, Assoc. Prof. of Civ. Engr. B.M.E., N.C. State Univ.; M.S.M.E., Purdue Univ.; Ph.D., Penn. State Univ.
- Binkowski, Francis S.*, Adj. Assoc. Prof. of Mar., Earth and Atmos. Sci. B.A., Rutgers Univ.; M.S., Ph.D., N.Y. Univ.
- Bir, Richard Edward*, Ext. Ornamentals Spec., Hort. Sci. B.S., M.S., Univ. of Mass.
- Bishir, John William*, Prof. of Math. & Biomath. A.B., Univ. of Mo.; M.S., State Univ. of Iowa; Ph.D., N.C. State Univ.
- Bishop, Paul Edward*, Assoc. Prof. (USDA) of Microbiol. B.S., Wash. State Univ.; M.S., Ph.D., Ore. State Univ.
- Black, Betty L.*, Assoc. Prof. of Zool. B.A., Lindenwood Coll.; M.S., Vanderbilt Univ.; Ph.D., Wash. Univ.
- Black, Chester Dunlap*, Assoc. Dean, Sch. of Agri. & Life Sci., Dir., Agri. Ext. Serv. & Ext. Prof., Adult & Comm. Coll. Ed. B.S., M.S., Univ. of Mo.; Ed.D., N.C. State Univ.
- Blair, Neal Edward*, Asst. Prof. of Mar., Earth & Atmos. Sci. B.S., Univ. of Md.; Ph.D., Stanford Univ.
- Bland, George Francis*, Assoc. Prof. of Elect. & Comp. Engr. & Assoc. Dean for Undergraduate Prog., School of Engineering. B.S., Brown Univ.; M.S., Univ. of Ill.
- Blank, Gary B.*, Lect. in For. B.S., Frostburg State Coll.; M.A., Univ. of Idaho.
- Blank, Philip Everett, Jr.*, Prof. of Engl. A.B., Princeton Univ.; M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Blankenship, Sylvia Meadows*, Asst. Prof. of Hort. Sci. B.S., M.S., Texas A & M Univ.; Ph.D., Oregon State Univ.
- Blazich, Frank Arthur*, Prof. of Hort. Sci. B.S., M.S., Univ. of Vt.; Ph.D., Penn. State Univ.
- Bledsoe, William Carlyle*, Dist. Super., TVA Prog. B.S., M.Ed., N.C. State Univ.
- Bliss, Milton Clay*, Asst. Dir. of Music. A.B., Univ. of N.C. at Chapel Hill; M.A., Univ. of N.C. at Greensboro.
- Bloomfield, Peter*, Prof. of Stat. B.S., Ph.D., Imperial Coll., Univ. of London.
- Blum, George Benjamin, Jr.*, Prof. of Agri. Engr. B.S., M. Ag. Eng., N.C. State Univ.
- Blum, Udo*, Prof. of Bot. B.A., Franklin Coll.; M.A., Indiana Univ.; Ph.D., Univ. of Okla.
- Blume, Denise Ellen*, Adj. Asst. Prof. of Botany. B.S., N. Ill. Univ.; Ph.D., Miami Univ.
- Bockleman, Mark Alan*, Asst. Sports Infor. Dir. B.S., The Defiance Coll.; M.S.C., Auburn Univ.
- Boles, Michael A.*, Assoc. Prof. of Mech. & Aero. Engr. B.S., M.S., Ph.D., N.C. State Univ.
- Bolynn, Elaine M.*, Univ. Develop. Officer. B.A., Univ. of Ga.
- Bonaminio, Vincent Paul*, Assoc. Prof. of Hort. Sci. B.S., Univ. of Conn.; M.S., Ph.D., N.C. State Univ.
- Bonanno, A. Richard*, Asst. Prof. of Hort. Sci. B.S., M.S., Cornell Univ.; Ph.D., Oregon State Univ.
- Bonham, Julia C.*, Asst. Prof. of Univ. Stud. & Hist. B.A., Univ. of Penn.; Ph.D., Brown Univ.
- Bonner, Cynthia P.*, Dir. of Housing & Res. Life. B.A., Carnegie-Mellon Univ.; M.Ed., Ed.S., West Ga. Coll.; Ph.D., Fla. State Univ.
- Bonner, John Roy*, Lect. in Phys. Ed. B.A., N.C. State Univ.; M.A.T., Univ. of N.C. at Chapel Hill.
- Boone, Edgar John*, Prof. & Head of Adult & Comm. Coll. Ed. & Asst. Dir., Agri. Ext. Serv. B.S., La. State Univ.; M.S., Ph.D., Univ. of Wis.
- Boos, Dennis Dale*, Assoc. Prof. of Stat. B.S., M.S., Ph.D., Fla. State Univ.
- Borden, Michael Ray*, Asst. Dir. of Stu. Dev. B.A., M.A., Ohio Univ.
- Borden, Robert C.*, Asst. Prof. of Civ. Engr. B.S., M.E., Univ. of Va.; Ph.D., Rice Univ.
- Borden, Roy H., Jr.*, Assoc. Prof. of Civ. Engr. B.S., Tufts Univ.; M.S., Ph.D., Northwestern Univ.
- Borland, James M.*, Instr. in Military Sci. B.S., Embry-Riddle Aeronautical Univ.; M.A., Pepperdine Univ.
- Boss, Charles Ben*, Assoc. Prof. of Chem. B.S., Wake Forest Univ.; Ph.D., Indiana Univ.
- Boss, Wendy F.*, Assoc. Prof. of Bot. B.S., Wake Forest Univ.; M.S., Univ. of Wash.; Ph.D., Indiana Univ.
- Bostick, George W., Jr.*, Assoc. Prof. of Agri. Comm. and Coord., Educ. Med. Unit. B.S., M.A., Tenn. Tech. Univ.; Ed.D., Indiana Univ. at Bloomington.
- Botcher, Robert W.*, Asst. Prof. of Biol. & Agri. Engr. B.S., Cornell Univ.; M.S., Ph.D., N. C. State Univ.
- Bowden, Edmond F.*, Asst. Prof. of Chem. B.S., Syracuse Univ.; Ph.D., Va. Commonwealth Univ.
- Bowen, Henry Dittimus*, Prof. of Biol. and Agri. Engr. B.S., M.S., Ph.D., Mich. State Univ.
- Bowen, Lawrence Hoffman*, Prof. of Chem. B.S., Va. Mil. Inst.; Ph.D., Mass. Inst. of Tech.
- Bowers, Crowell Gattis, Jr.*, Asst. Prof. of Biol. & Agri. Engr. B.S., M.S., Ph.D., N.C. State Univ.
- Bowers, Henry*, Assoc. Vice Chancellor, Div. of Stud. Aff. & Dir. of Univ. Stud. Cntr. A.B., Univ. of N.C. at Chapel Hill; M.A., Columbia Univ.
- Bowker, John W.*, Adj. Prof. of Phil. & Rel.
- Bowman, Daryl Thomas*, Assoc. Prof. of Crop Sci. B.S., M.S., Univ. of Ga.; Ph.D., La. State Univ. Agri. & Mech. Coll.
- Bowman, Karl Frederick*, Asst. Prof., of Food Ani. and Equine Med. B.S., D.V.M., Mich. State Univ.; M.S., Auburn Univ.
- Boyd, Leon C.*, Asst. Prof. of Food Sci. B.S., N.C. Central Univ.; M.S., N.C. State Univ.; Ph.D., Univ. of Md.
- Boyers, Albert S.*, Lect. in Mech. and Aero. Engr. B.S., Purdue Univ.; M.S., Univ. of Ill.
- Boyette, Michael D.*, Ext. Ener. Spec. of Biol. & Agri. Engr. B.S., N.C. State Univ.
- Bradbury, Phyllis Clarke*, Prof. of Zool. A.B., M.A., Ph.D., Univ. of Calif. at Berkeley.
- Braddy, Barri Ann*, Adj. Asst. Prof. of Psych. B.S., Coll. of Charleston; M.S., Ph.D., N.C. State Univ.
- Bradley, Julius Roscoe, Jr.*, Prof. of Entom. B.S., La. Polytech. Inst.; M.S., Ph.D., La. State Univ.
- Bradrow, Ronald L.*, Adj. Prof. of Mech. & Aero. Engr. B.S., Memphis State Univ.; Ph.D., Univ. of Miss.
- Bragg, Arnold Watts, Jr.*, Res. Asst. in Agri. & Life Sci. B.S., Duke Univ.; B.S., M.S., N.C. State Univ.
- Braham, Richard Riley*, Asst. Prof. of For. B.S., M.S., Univ. of Mich.; Ph.D., N.C. State Univ.
- Brake, John Thomas*, Assoc. Prof. of Poul. Sci. B.S., Ph.D., N.C. State Univ.
- Bramlett, David L.*, Adj. Asst. Prof. of For. B.S., M.S., N.C. State Univ.; Ph.D., Va. Polytech. Inst. & State Univ.
- Brandenburg, Rick Lynn*, Asst. Prof. of Entom. B.S., Purdue Univ.; Ph.D., N.C. State Univ.
- Brandt, Marilyn M.*, Asst. Prof. & Asst. Head for Sched. of Engl. A.B., Meredith Coll.; M.A., Duke Univ.
- Brantley, John Calvin, III*, Adj. Asst. Prof. of Civ. Engr. B.S.C.E., N.C. State Univ.; M.S.C.E., Northwestern Univ.
- Breitschwerdt, Edward Bealmear*, Prof. of Comp. Ani. and Special Spec. Med. B.S., Univ. of Md.; D.V.M., Univ. of Ga.
- Bretting, Peter Konrad*, Res. Asst. in Crop Sci. B.S., Tulane Univ.; Ph.D., Indiana Univ.
- Breuhaus, Babetta A.*, Asst. Prof. of Food Ani. & Equine Med. B.S., Ph.D., D.V.M., Mich. State Univ.
- Brewer, Charles Edward*, Ext. Spec. of Poul. Sci. B.S., Berea College; M.S., Univ. of Ky.
- Brglez, Frank*, Adj. Assoc. Prof. of Elect. & Comp. Engr. Dip. Ing., Univ. of Ljubijana (Yugoslavia); Ph.D., Univ. of Colo.
- Bridgewater, Floyd E., Jr.*, Prof. (USFS) of For. B.S., Ph.D., Okla. State Univ.

- Briggs, Garrett*, Dean, Sch. of Phys. and Math. Sci. and Prof., Mar., Earth, and Atmos. Sci. B.S., M.S., Southern Meth. Univ.; Ph.D., Univ. of Wis. at Madison
- Brisky, Lauren J.*, Assoc. Vice Chan. for Fin. & Bus. B.A., Simmons Coll., Boston; M.B.A., Cornell Univ.
- Brisson, Robert Curtis*, Assoc. Prof. of Soc. & Anth. B.S., M.S., Ph.D., N.C. State Univ.
- Bristol, David G.*, Asst. Prof. of Food Ani. & Equine Med. B.S., D.V.M., Cornell Univ.
- Britt, Jack Haiden*, Prof. of Ani. Sci. B.S., W. Ky. Univ.; M.S., Ph.D., N.C. State Univ.
- Broadwell, Frances Annette*, Counselor, Stud. Aff. B.A., Guilford Coll.; M.A., Univ. of N.C. at Greensboro; Ph.D., Duke Univ.
- Brockhaus, John Albert*, Res. Assoc. in For. B.S., M.S., Calif. Polytech. St. Univ.
- Brooks, Eugene H.*, Lect. in Econ. & Bus. A.B., Duke Univ.; M.B.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Brooks, Joseph F.*, Ext. Prof. of Hort. Sci. & Assoc. St. Ldr.-Agri. B.S., M.S., Ed.D., N.C. State Univ.
- Brooks, Wayne Maurice*, Prof. of Entom. B.S., N.C. State Univ.; Ph.D., Univ. of Calif. at Berkeley.
- Broome, Stephen White*, Asst. Prof. of Soil Sci. B.S., M.S., Ph.D., N.C. State Univ.
- Brothers, Joel Van*, Asst. Prof. of Phys. Ed. A.B., M.A.T., Univ. of N.C. at Chapel Hill.
- Brown, Charlotte Vestal*, Curator of Art, Div. of Stud. Aff. A.B., Univ. of N.C. at Greensboro; Ph.D., Univ. of N.C. at Charlotte.
- Brown, Harry J.*, Adj. Instr. in Elect. & Comp. Engr. B.E.E., M.E.E., Villanova Univ.
- Brown, Henry Larry*, Asst. Prof. of Phys. Ed. B.S., M.S., Brigham Young Univ.
- Brown, Henry Seawell*, Prof. of Mar., Earth and Atmos. Sci. A.B., Berea Coll.; M.S., Ph.D., Univ. of Ill.
- Brown, Homer E.*, Adj. Prof. of Elec. & Comp. Engr. B.E.E., Univ. of Minn.
- Brown, James Scott*, Asst. Prof. of Soc. & Anth. B.A., M.S.W., Univ. of N.C. at Chapel Hill.
- Brown, Joe B., Jr.*, Coord. Spec. Prog., Off. of the Provost & Asst. Prof. of Phys. Ed. B.A., Shaw Univ.; M.A., George Wash. Univ.; Ph.D., Ohio State Univ.
- Brown, John Gregory*, Lect. in Engl. B.A., Tulane Univ.; M.A., La. State Univ.
- Brown, Kathleen R.*, Lib. & Asst. Dept. Head, Mono. Cat. B.A., Bates Coll.; M.L.S., Univ. of Rhode Island; M.A., Univ. of Maine.
- Brown, Melvin*, Adj. Assoc. Prof., Oper. Res., Sch. of Engr. B. Sc., McGill Univ.; M.S., Univ. of Mich.; Ph.D., Case Western Reserve.
- Brown, Talmage T., Jr.*, Prof. of Microb., Path., and Parasit. B.S., N.C. State Univ.; D.V.M., Okla. State Univ.; Ph.D., Cornell Univ.
- Brown, Thomas R.*, Dir. of Int'l. Trade Ctr., Univ. Ext. B.S., Fairleigh Dickenson Univ.
- Brown, William Jasper, Jr.*, Adj. Assoc. Prof. of Ed. Ldrshp. & Prog. Eval. B.S., M.Ed., N.C. State Univ.; Ed.D., Penn. State Univ.
- Brownie, Cavell*, Assoc. Prof. of Stat. B.S., Univ. of N. Wales; Ph.D., Cornell Univ.
- Broumie, Cecil Fitz-George*, Asst. Prof. of Anat., Physiol. Sci. & Radiol. B.S., D.V.M., Ph.D., Cornell Univ.
- Bruck, Robert Ian*, Assoc. Prof. of Plant Path. & For. B.A., Ph.D., State Univ. of N.Y.
- Bruneau, Arthur Henry*, Asst. Prof. of Crop Sci. B.S., M.S., Univ. of Rhode Island; Ph.D., Univ. of Neb.
- Bryan, Robert S., Jr.*, Asst. Dir. of Stud. Dev. B.A., N.C. State Univ.; M.A., Ohio State Univ.
- Bryan, Robert Sedgwick*, Prof. of Phil. & Head of Phil. & Rel. B.A., M.A., Ph.D., Univ. of Va.
- Bryan, William S.*, Res. Asst. & Teach. Tech., Wood & Paper Sci. B.S., Davidson Coll.; M.W.P.S., N.C. State Univ.
- Bryant, Michael David*, Assoc. Prof. of Mech. & Aero. Engr. B.S., Univ. of Ill., Chicago; M.S., Ph.D., Northwestern Univ.
- Buchanan, David R.*, Prof. of Text. Engr. & Sci. B. Sc., Capital Univ.; Ph.D., Ohio State Univ.
- Buckmaster, Herbert Leo*, Dir., of Adm. Comp. Serv. B.S., M.S., Tex. A. & M. Univ.
- Buckner, Robert Lynn*, Adj. Instr. in Rec. Res. Adm. A.B., Univ. of N.C. at Chapel Hill; M.P.A., N.C. State Univ.
- Buhr, Rita Layden*, Lect. in Engl. B.A., M.A., Purdue Univ.
- Bull, Joseph O.*, Univ. Devel. Officer. B.S., M.A., J.D., Ohio State Univ.
- Bull, Kathy Cleveland*, Prog. Dir., Stud. Aff. B.A., M.A., Bowling Green State Univ.
- Bullerwell, Arthur C.*, Instr. in Text. Engr. & Sci. B.S., M.S., N.C. State Univ.; M.S., Union Coll.
- Bumgardner, Carl Lee*, Prof. of Chem. B.A.Sci., Univ. of Toronto; Ph.D., Mass. Inst. of Tech.
- Bunch, Susan E.*, Asst. Prof. of Comp. Ani. & Special Spec. Med. D.V.M., Purdue Univ.; Ph.D., Cornell Univ.
- Bundy, James Henry*, Univ. Registrar. A.B., Duke Univ.; M.Ed., E. Carolina Univ.
- Bundy, Margaret Chubbuck*, Teach. & Res. Tech. in Chem. B.S., Cornell Univ.
- Buol, Stanley Walter*, Prof. of Soil Sci. & For. B.S., M.S., Ph.D., Univ. of Wis.
- Burak, Kathryn A.*, Lect. in Engl. B.A., Kutztown Univ.; M.F.A., Univ. of Mass.
- Burkey, Kent Oliver*, Asst. Prof. (USDA) of Crop Sci. & Bot. B.A., Warren Wilson Coll.; Ph.D., Ohio State Univ.
- Burkholder, JoAnn M.*, Asst. Prof. of Botany. B.S., Iowa State Univ.; M.S., Univ. of R.I.; Ph.D., Mich. State Univ.
- Burnette, David Ronald*, Dist. Ext. Dir. in the Agri. Ext. Ser. B.S., Berry College; M.Ed., Ed.D., N.C. State Univ.
- Burnham, Kenneth Paul*, Assoc. Prof. (USDA) of Stat. B.S., Portland State Univ.; M.S., Ph.D., Oregon State Univ.
- Burniston, Ernest Edmund*, Prof. & Head of Math. B.Sc., Sir John Cass Coll. (London); Ph.D., Birkbeck College (London).
- Burns, Joseph Charles*, Prof. (USDA) of Crop Sci. & Ani. Sci. B.S., M.S., Iowa State Univ.; Ph.D., Purdue Univ.
- Burns, Robert Paschal, Jr.*, Prof. & Head of Arch. & Assoc. Dean, School of Design. B.Arch., N.C. State Univ.; M.Arch., Mass. Inst. of Tech.
- Burton, Joseph William*, Assoc. Prof. (USDA) of Crop Sci. B.S., Univ. of Ga.; M.S., Iowa State Univ.; Ph.D., N.C. State Univ.
- Burton, Sarah Kilpatrick*, Adj. Asst. Prof. of Engl. B.A., S. Conn. State Coll.; M.A., Ph.D., Univ. of Ala.
- Businger, Steven*, Asst. Prof. in Mar., Earth, & Atmos. Sci. B.S., Ph.D., Univ. of Wash.; M.S., Univ. of Colo.
- Butcher, Kenneth Roy*, Prof. of Ani. Sci. B.S., Clemson Univ.; M.S., Ph.D., N.C. State Univ.
- Butler, James Kenneth, Jr.*, Sr. Ext. Spec. in Ani. Sci. B.S., M.S., N.C. State Univ.
- Butler, Reginald Dennin*, Instr. in Hist. B.A., West. Wash. State Coll.; M.A., Johns Hopkins Univ.
- Butler, Ronald Clark*, Assoc. Vice Chancellor for Stud. Aff. B.S., E. Carolina Univ.; M.Ed., Univ. of N.C. at Chapel Hill.
- Byers, Ralph*, Asst. Prof. of Math. B.S., McGill Univ.; M.S., Ph.D., Cornell Univ.
- Byrd, Thomas Mitchell*, Ext. Prof. & In Charge of Press, Radio & T.V. & Proj. Coord., Agri. Comm. B.A., M.A., Univ. of N.C. at Chapel Hill.
- Cain, Robert T.*, Asst. Football Coach. B.S., M.Ed., Furman Univ.
- Cairns, Robert Scott, III*, Asst. Dir. for Spec. Proj. in Info. Serv. B.A., N.C. Wesleyan
- Caldwell, Billy E.*, Prof. & Head of Crop Sci. B.S., M.S., N.C. State Univ.; Ph.D., Iowa State Univ.

- Caldwell, Robert A.*, Asst. Football Coach. B.A., Furman Univ.
- Calkins, Jerry M.*, Adj. Assoc. Prof. of Ind. Engr. B.S., M.S., Univ. of Wy.; Ph.D., Univ. of Md.; M.D., Univ. of Ariz.
- Callanan, Roger A. E.*, Assoc. Coord., Acad. Skills Prog. B.A., Stonehill Coll.; M.S.Ed., Univ. of Hartford; D.Ed., N.C. State Univ.
- Cameron, Spurgeon*, Asst. Dir. of Urban Aff. & Comm. Serv.Cntr. B.S., N.C. A&T State Univ.; M.C.R.P., Rutgers Univ.
- Camp, Leon Raymond*, Assoc. Prof. of Speech-Comm. B.A., Sioux Falls Coll.; M.A., Indiana Univ.; Ph.D., Penn. State Univ.
- Campbell, Charles Lee*, Assoc. Prof. of Plant Path. B.S., M.S., Colo. State Univ.; Ph.D., Penn. State Univ.
- Campbell, Dale F.*, Asst. Prof. of Adult and Comm. Coll. Ed. A.B., Univ. of N.C. at Chapel Hill; M.A., Appalachian St. Univ.; Ph.D., Univ. of Tex.
- Campbell, James Franklin*, Adj. Assoc. Prof. of Mech. & Aero. Engr. B.S., Miss. State Univ.; M.S., Ph.D., Va. Polytech. Inst. & State Univ.
- Campbell, Larry Edward*, Asst. Prog. Dir., Univ. Stud. Cntr. B.A., N.C. Central Univ.
- Campbell, Robert George*, Adj. Asst. Prof. of For. B.S., Univ. of Tenn. at Knoxville; M.S., Univ. of Ga.
- Campbell, Stephen La Vern*, Prof. of Math. B.A., Dartmouth Coll.; M.S., Ph.D., Northwestern Univ.
- Campbell, William Vernon*, Prof. of Entom. B.S., M.S., Miss. State Coll.; Ph.D., N.C. State Univ.
- Campion, Michael Andrew*, Adj. Asst. Prof. of Psych. B.A., Univ. of Minn.; M.A., Univ. of Akron; Ph.D., N.C. State Univ.
- Canada, John Robert*, Prof. of Ind. Engr. B.S.I.E., M.S.I.E., Va. Polytech. Inst. & State Univ.; Ph.D., Ga. Inst. of Tech.
- Candler, John*, Div. Coach & Asst. Str. Coach. B.S., Univ. of Mich.; M.Ed., Univ. of S.C.
- Cannon, Ronald Eugene*, Res. Asst. in Gen. B.S., Davidson Coll.
- Caple, Patricia C.*, Assoc. Prof. of Speech-Comm. B.S., Hampton Univ.; Ph.D., Union Grad. School
- Carawan, Roy Eugene*, Assoc. Prof. of Food Sci. B.S., M.S., N.C. State Univ.; Ph.D., Ohio State Univ.
- Carbonell, Ruben G.*, Prof. of Chem. Engr. B.S., Manhattan Coll.; M.A., Ph.D., Princeton Univ.
- Carrey, John Bennett*, Asst. Prof. of Poul. Sci. B.S., Kan. State Univ.; M.S., So. Dakota State Univ.; Ph.D., Kan. State Univ.
- Carlson, Gerald A.*, Prof. of Econ. B.S., Ore. State Univ.; M.S., Ph.D., Univ. of Calif. at Davis.
- Carlton, Caroline S.*, Lib., Head of Design Lib. B.A., Univ. of Wales; M.L.S., Univ. of Calif. at L.A.
- Carlton, Charles Hope*, Prof. of Hist. B.A., Univ. of Wales; M.A., Ph.D., Univ. of Calif. at L.A.
- Carmichael, Halbert Hart*, Prof. of Chem. B.S., Univ. of Tenn. at Knoxville; Ph.D., Univ. of Calif. at Berkeley.
- Carraway, Ernest Raeford*, Lect. in Econ. & Bus. A.B., J.D. Univ. of N.C. at Chapel Hill.
- Carroll, Daniel Edward, Jr.*, Prof. of Food Sci. & Hort. Sci. B.S., Univ. of Mass.; M.S., Ph.D., Va. Polytech. Inst. & State Univ.
- Carroll, Frank I.*, Adj. Prof. of Text. Chem. B.S., Auburn Univ.; Ph.D., Univ. of N.C. at Chapel Hill
- Carson, Christopher Paul*, Ext. Spec. in Bio. & Agri. Engr. B.S., N.C. State Univ.
- Carstens, Timothy V.*, Lib. & Mon. Cat. Lib. B.A., Colby Coll.; M.L.S., Rutgers Univ.
- Carter, Cathy C.*, Res. Asst. in Plant Path. B.S.A., M.P.P.P.M., Univ. of Ga.
- Carter, George L., Jr.*, Prof. of Adult & Comm. Coll. Ed. B.S., Univ. of Tenn.; M.S., Ph.D., Univ. of Wis.
- Carter, Judson Wade*, Ext. Spec. Text. B.S., Appalachian State Univ.
- Carter, Michael P.*, Instr. in Engl. B.A., M.A., Univ. of N.C., Chapel Hill.
- Carter, Philip Brian*, Assoc. Vice Chan., Univ. Res., & Prof., Microbiol., Path. & Parasit. B.S., Ph.D., Univ. of Notre Dame.
- Carter, Thomas Ames*, Ext. Prof. of Poul. Sci. B.S., M.S., Ph.D., Penn. State Univ.
- Carter, Thomas E.*, Asst. Prof. (USDA) of Crop Sci. B.S., M.S., Univ. of Ga.; Ph.D., N.C. State Univ.
- Carter, William Randolph*, Prof. of Phil. B.A., M.A., Univ. of Colo.; Ph.D., Univ. of Va.
- Caruolo, Edward Vitangelo*, Prof. of Ani. Sci. B.S., Univ. of Rhode Island; M.S., Univ. of Conn.; Ph.D., Univ. of Minn.
- Cassel, Donald Keith*, Prof. of Soil Sci. B.S., Univ. of Ill.; M.S., Ph.D., Univ. of Calif. at Davis.
- Catignani, George Louis, Jr.*, Assoc. Prof. of Food Sci. B.A., Ph.D., Vanderbilt Univ.
- Caudle, Neil Craven*, Intnat'l. Prog. Editor, Sch. of Agri. & Life Sci. B.A., Wake Forest Univ.
- Cavaroc, Victor Viosca*, Jr., Prof. of Mar., Earth and Atmos. Sci. B.S., Tulane Univ.; M.S., Ph.D., La. State Univ.
- Caves, John Richard*, Mgr. React. Oper. Train. B.S., Memphis St. Univ.
- Caves, Thomas Courtney*, Assoc. Prof. of Chem. B.S., Univ. of Okla.; Ph.D., Columbia Univ.
- Cavin, Ralph K. III*, Adj. Prof. of Elect. & Comp. Engr. B.S., M. S., Miss. State Univ.; Ph.D., Auburn Univ.
- Cermak, Anthony F.*, Adj. Prof. of Nucl. Engr. M.S., Charles Univ. (Prague); M.S., Ph.D., Tech. Univ. (Prague).
- Chalou, Cynthia*, Study Abroad Adv., Stud. Aff. B.S., Mich. State Univ.; M.S., N.C. State Univ.
- Chamblee, Douglas Scales*, Prof. of Crop Sci. B.S., M.S., N.C. State Univ.; Ph.D., Iowa State Univ.
- Champion, Larry Stephen*, Prof. of Engl. A.B., Davidson Coll.; M.A., Univ. of Va.; Ph.D., Univ. of N.C. at Chapel Hill.
- Chandler, Richard Edward*, Prof. of Math. B.S., M.S., Ph.D., Fla. State Univ.
- Chang, Bao Chu*, Lib. & Mono. Cat. Lib. B.A., Nat'l Taiwan Univ.; M.Ed., N.C. State Univ.; M.L.S., Univ. of N.C. at Chapel Hill.
- Chang, Hou-min*, Prof. of Wood & Paper Sci. B.S., Nat'l Taiwan Univ.; M.S., Ph.D., Univ. of Wash.
- Chao, Allen Chia-Chen*, Assoc. Prof. of Civ. Engr. B.S., M.S., Nat'l Taiwan Univ.; Ph.D., Clemson Univ.
- Chappell, V. Glenn*, Univ. Develop. Off. B.S., N.C. State Univ.; Ph.D., Univ. of Tenn.
- Charlton, Harvey Johnson*, Asst. Prof. of Math. B.S., Univ. of Va.; M.S., Ph.D., Va. Polytech. Inst. & State Univ.
- Charlton, John D.*, Adj. Asst. Prof. of Elect. & Comp. Engr. B.S., Univ. of Fla.; Ph.D., Univ. of Va.
- Chasson, Albert Leon*, Adj. Prof. of Entom. A.B., B.S., Univ. of Mo.; M.D., Univ. of Cincinnati.
- Chastain, Shanna Moore*, Asst. Prof. of Phys. Ed. B.S., M.A., E. Carolina Univ.
- Cheek, William Anderson*, Asst. Prof. of Phys. Ed. B.S., M.S., N.C. Central Univ.
- Chen, Chen-Loung*, Sr. Res. Assoc. in Wood & Paper Sci. B.S., Nat'l Taiwan Univ.; Ph.D., Univ. of Heidelberg (Germany).
- Chen, Henry Y.*, Ext. Spec., Agri. Ext. Serv. B.S., Nat'l Taiwan Univ.; M.S., Ph.D., N.C. State Univ.
- Chen, Yok*, Adj. Prof. of Mat. Sci. & Engr. B.Sc., Univ. of Wis. at Madison; Ph.D., Purdue Univ.
- Chern, Rey T.*, Asst. Prof. of Chem. Engr. B.S., Nat'l Taiwan Univ.; M.S., Ph.D., N.C. State Univ.
- Chernoff, Neil*, Adj. Assoc. Prof. of Poul. Sci. B.S., Brooklyn Coll.; M.A., Ph.D., Univ. of Miami.
- Cheshire, Heather M.*, Res. Asst. & Teach. Tech. in For. B.S., Va. Polytech. Inst. & State Univ.; M.S., N.C. State Univ.

- Chesney, Clyde Eugene*, Ext. Asst. Prof. of Rec. Res. Adm. & Dist. Ext. Dir., Agri. Ext. Ser. B.S., M.S., N.C. State Univ.; Ph.D., Mich. State Univ.
- Chevalier, Jean P.*, Tech. Dir. of Stewart Theatre. B.F.A., Old Dominion Univ.; M.A., Purdue Univ.
- Chiavetta, Stephen V.*, Adj. Asst. Prof. of Zool. B.A., LaSalle Coll.; M.D., Marquette School of Med.
- Chilton, Mary-Dell*, Adj. Prof. of Gen. B.S., Ph.D., Univ. of Ill. at Urbana.
- Ching, Jason Kwock Sung*, Adj. Assoc. Prof. of Mar., Earth & Atmos. Sci. B.S., Univ. of Hawaii; M.S., Penn. State Univ.; Ph.D., Univ. of Wash.
- Chitsaz, Sirus*, Dir. Center for Comm. & Signal Proc. & Assoc. Prof. of Elect. & Comp. Engr. B.S., Univ. of Mo., M.S., N.C. State Univ.
- Chou, Wushow*, Prof. of Comp. Sci. & Elect. & Comp. Engr. B.S., Cheng Kung Univ.; M.S., Univ. of N.Mex.; Ph.D., Univ. of Calif. at Berkeley.
- Christensen, Janice Rae*, Sr. News Ed. in Agri. Comm. B.S., Univ. of Wis.
- Christensen, Vern L.*, Assoc. Prof. of Poul. Sci. B.S., Utah State Univ.; M.S., Brigham Young Univ.; Ph.D., Univ. of Mo. at Columbia.
- Christian, Erich*, Adj. Prof. of Elect. & Comp. Engr. Dipl. Ing., Vienna Inst. of Tech.
- Chromy, James Raymond*, Adj. Assoc. Prof. of Stat. B.Sc., Univ. of Neb.; M.E.S., Ph.D., N.C. State Univ.
- Chu, Moody Ten-Chao*, Asst. Prof. of Math. B.S., Nat'l Taiwan Univ.; M.S., West. Ill. Univ.; Ph.D., Mich. State Univ.
- Chung, Kwong Tuzz*, Prof. of Phys. B.S., Nat'l Taiwan Univ.; Ph.D., State Univ. of N.Y. at Buffalo.
- Chung, Lung Ock*, Assoc. Prof. of Math. B.A., New Asia Coll. (Hong Kong); M.A., McGill Univ. (Canada); Ph.D., Univ. of Calif. at L.A.
- Cigler, Beverly Ann*, Assoc. Prof. of Pol. Sci. & Pub. Adm. B.A., Thiel Coll.; M.A., Ph.D., Penn. State Univ.
- Clapp, Anne Calvert*, Asst. Prof. of Text. Mgmt. & Tech. B.S., M.S., Fla. State Univ.; Ph.D., Univ. of N.C. at Greensboro.
- Clapp, Timothy Gladstone*, Asst. Prof. of Text. Engr. & Sci. B.S., M.S., Ph.D., N.C. State Univ.
- Clare, Debra Arwood*, Res. Asst. in Ani. Sci. B.A., Appalachian State Univ.; Ph.D., N.C. State Univ.
- Clark, Donna Sue*, Lect. in Phys. Ed. A.B., M.A., Morehead St. Univ.
- Clark, Edward Depriest, Sr.*, Assoc. Prof. of Engl. B.S., N.C. A&T State Univ.; M.A., N.Y. Univ.; Ph.D., Syracuse Univ.
- Clark, Edward Lewis*, Sr. Engr. Ext. Spec. & Lect. in Ind. Engr. A.B., Duke Univ.
- Clark, James William, Jr.*, Assoc. Prof. of Engl. A.B., Univ. of N.C. at Chapel Hill; M.A., Ph.D., Duke Univ.
- Clark, Lawrence M.*, Prof. of Math. Ed. & Assoc. Prov. B.S., Va. State Coll.; M.Ed., Ed.D., Univ. of Va.
- Clark, Robert Louis*, Prof. of Econ. & Bus. B.A., Millsaps Coll.; M.A., Ph.D., Duke Univ.
- Clark, Roger H.*, Prof. of Arch. B.S. in Arch., Univ. of Cincinnati; M.Arch., Univ. of Wash.
- Clark, Walter Foy*, Coastal Law Spec., Sea Grant Coll. Prog., B.A., East Carolina Univ.; M.S., Univ. of N.C. at Chapel Hill; J.D., Wake Forest Univ.
- Clarke, Susan Tonkonogy*, Asst. Prof. of Microbiol., Path. & Parasit. B.A., Rutgers Univ.; Ph.D., Harvard Univ.
- Clary, Joseph Ray*, Assoc. Prof. & Head of Occup. Ed. B.S., M.Agr. Ed., N.C. State Univ.; Ph.D., Ohio State Univ.
- Clawson, Albert J.*, Prof. of Ani. Sci. B.S., Univ. of Neb.; M.S., Kan. State Coll.; Ph.D., Cornell Univ.
- Clay, John S.*, Ext. Spec. in Ani. Sci. B.S., M.S., Va. Polytech. Inst. and State Univ.
- Clifford, William Bramwell, II*, Prof. of Soc. & Anth. B.S., Grove City Coll.; M.A., W. Va. Univ.; Ph.D., Univ. of Ky.
- Cobb, Grover Cleveland, Jr.*, Assoc. Prof. of Phys. B.S., M.S., Univ. of Ga.; Ph.D., Univ. of Va.
- Coble, Harold D.*, Prof. of Crop Sci. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of Ill. at Urbana.
- Cockerham, Columbus Clark*, William Neal Reynolds Prof. of Stat. & Prof. of Gen. B.S., M.S., N.C. State Univ.; Ph.D., Iowa State Univ.
- Cockshutt, Paul Rodman, Jr.*, Lect. in Engl. A.B., Wash. & Lee Univ.
- Coe, Charles Koestlin*, Asst. Prof. of Pol. Sci. & Pub. Adm. B.A., Dartmouth Coll.; M.P.A., Univ. of Mich.; D.P.A., Univ. of Ga.
- Coffey, Elizabeth S.*, Ed. Asst. B.A., Univ. of Ga.
- Coffey, Max Terry*, Asst. Prof. of Ani. Sci. B.S., M.S., Ph.D., Univ. of Ga.
- Cofresi, Lina Leonor*, Assoc. Prof. & Asst. Head of For. Lang. & Lit. B.A., Ga. State Univ.; M.A., Ph.D., Vanderbilt Univ.
- Coggins, Leroy*, Prof. & Head of Microbiol., Path. & Parasit. B.S., N.C. State Univ.; D.V.M., Okla. State Univ.; Ph.D., Cornell Univ.
- Cohen, Jo-Ann Deborah*, Assoc. Prof. of Math. B.S., Univ. of Md.; M.A., Ph.D., Duke Univ.
- Colby, David R.*, Adj. Asst. Prof. of Zool. B.S., M.S., Univ. of Mass.; Ph.D., N.C. State Univ.
- Cole, James Lawrence*, Assoc. Prof. of Psych. A.B., Oberlin Coll.; M.A., Princeton Univ.; Ph.D., Duke Univ.
- Coleman, Samuel Kataoka*, Assoc. Dir., N.C. Japan Ctr. & Lect. B.A., Univ. of Calif. at Santa Barbara; M.S., Ph.D., Columbia Univ.
- Collender, Robert N.*, Asst. Prof. of Econ. & Bus. B.A., Univ. of Calif. at Santa Cruz; M.B.A., Ph.D., Univ. of Calif. at Berkeley.
- Collins, Edward Lee, Jr.*, Ext. Spec. in Ind. Ext. Serv. B.A., N.C. State Univ.
- Collins, Wanda Williams*, Assoc. Prof. of Hort. Sci. B.S., M.S., Ph.D., N.C. State Univ.
- Collins, William Kerr*, Philip Morris Prof. of Crop Sci.; Assoc. Dept. Head for Ext., & Specialist-In-Charge. B.S., M.S., N.C. State Univ.; Ph.D., Iowa State Univ.
- Colquitt, Rosa*, Asst. Prof. of Adult & Comm. Coll. Ed. B.S., Fayetteville State Univ.; M.A., Ed.D., N.C. State Univ.
- Colvin, David Payne*, Adj. Asst. Prof. of Mech. & Aero. Engr. B.S., M.S., La. Tech.; Ph.D., La. State Univ.
- Combs, Russell Carr*, Asst. Prof. of Phys. Ed. B.S., David Lipscomb Coll.; M.S., Univ. of Tenn.
- Conkling, Mark A.*, Asst. Prof. of Gen. B.S., Okla. State Univ.; M.S., Ph.D., Univ. of Ill. at Urbana.
- Connors, John I.*, Adj. Instr. in Rec. Res. Adm. B.S., M.S., N.C. State Univ.
- Conrad, Hans*, Prof. of Mat. Sci. & Engr. B.S., Carnegie Inst. of Tech.; M. Engr., D. Engr., Yale Univ.
- Conway, Thomas E. H., Jr.*, Asst. Dir., Acad. Skills Prog. B.S., N.C. A & T State Univ.
- Cook, Charles B.*, Res. Asst. in Elect. & Comp. Engr.
- Cook, Eleanor I.*, Lib. & Ser. Catal. A.B., M.L.S., Univ. of N.C. at Chapel Hill.
- Cook, James W., Jr.*, Asst. Prof. of Phys. B.S., Auburn Univ.; M.S., Univ. of Ala.; Ph.D., Clemson Univ.
- Cook, Maurice Gayle*, Prof. of Soil Sci. B.S., M.S., Univ. of Ky.; Ph.D., Va. Polytech. Inst. & State Univ.
- Cook, Robert Edward*, Prof. of Poul. Sci. & Asst. Dean, School of Agri. & Life Sci. B.S., M.S., W. Va. Univ.; Ph.D., N.C. State Univ.
- Cook, Thomas Winfield*, Adj. Lect. in Comp. Sci. B.S., Elmira Coll.; M.S., State Univ. of N.Y.
- Cooke, Armand V.*, Assoc. Prof. of Prod. Design. B.S.I.D., Univ. of Cincinnati.
- Cooper, Arthur Wells*, Prof. & Head of For. & Prof. of Bot. B.A., M.A., Colgate Univ.; Ph.D., Univ. of Mich.
- Cooper, Charles Staples*, Supr. & Sr. Engr. Ext. Spec. in Ind. Ext. Serv. B.A., Duke Univ.; M.E., N.C. State Univ.

- Cooper, *Nelvin Eugene*, Assoc. Prof. of Phys. Ed. B.A., Elon Coll.; M.E., Univ. of N.C. at Chapel Hill.
- Coots, *Alonzo Freeman*, Assoc. Prof. of Chem. B.E., Ph.D., Vanderbilt Univ.
- Copeland, *Billy Joe*, Prof. of Zool. & Bot. & Mar., Earth & Atmos. Sci. & Dir. of N.C. Sea Grant Prog. B.S., M.S., Ph.D., Okla. State Univ.
- Copeland, *Dana Derward*, Adj. Asst. Prof. of Curr. & Instr. B.A., Rice Univ.; M.D., Ph.D., Duke Univ.
- Corbett, *Wayne Thompson*, Assoc. Prof. of Microbiol., Path., & Parasit. B.S., Penn. State Univ.; V.M.D., Univ. of Penn.; M.P.H., D.P.H., Univ. of Pitt.
- Corbin, *Frederick Thomas*, Prof. of Crop Sci. B.S., Wake Forest Univ.; M.Ed., Univ. of N.C. at Chapel Hill; Ph.D., N.C. State Univ.
- Cordell, *Harold Kenneth*, Adj. Assoc. Prof. of Rec. Res. Adm. B.S., M.F., Ph.D., N.C. State Univ.
- Corder, *Billie F.*, Adj. Assoc. Prof. of Psych. B.S., Memphis State Univ.; M.A., Vanderbilt Univ.; Ed.D., Univ. of Ky.
- Cornelius, *Wayne Leslie*, Assoc. Statistician in Stat. B.A., Luther Coll.; M.St., N.C. State Univ.
- Cornell, *Richard H.*, Prof. of Wood & Paper Sci. B.A., Colgate Univ.; M.S., Ph.D., Lawrence Univ. Inst. of Paper Chem.
- Cornwell, *John C.*, Assoc. Prof. & Teaching Coord. of Ani. Sci. B.S., Clemson Univ.; M.S., Ph.D., La. State Univ.
- Corson, *Peter Burton*, Adj. Assoc. Prof. of Mech. & Aero. Engr. B.S.M.E., Ph.D., Univ. of Penn.
- Cortes, *Dario Alvaro*, Assoc. Prof. of For. Lang. & Lit. B.A., Queens Coll.; M.A., Univ. of Va.; Ph.D., Univ. of Ill. at Urbana.
- Coster, *John K.*, Prof. of Agri. Ed. B.S., Purdue Univ.; M.A., Ph.D., Yale Univ.
- Cotanch, *Stephen Robert*, Prof. of Phys. B.S., Indiana Univ.; Ph.D., Fla. State Univ.
- Coulbourn, *Lucille*, Dir. of Info. Serv. A.B., E. Carolina Univ.
- Courchane, *Marsha J.*, Asst. Prof. of Econ. & Bus. B.A., M.A., Ph.D., Northwestern Univ.
- Coutu, *Arthur James*, Prof. of Econ. & Bus. B.S., M.S., Univ. of Conn.; Ph.D., N.C. State Univ.
- Covington, *David Harrison*, Asst. Prof. of Engl. B.A., Univ. of Fla.; M.A., Ph.D., Vanderbilt Univ.
- Cowan, *Sarah L.*, Asst. Prof. of Home Econ. B.S.G.H.E., Ph.D., Univ. of N.C. at Greensboro.
- Cowen, *Peter*, Asst. Prof. of Microbiol., Path. & Parasit. B.A., Beloit Coll.; M.S., Univ. of Calif. at Davis; D.V.M., Univ. of Ibadan (Nigeria).
- Cowling, *Ellis Brevier*, Prof. of Plant Path., For., & Wood & Paper Sci. & Assoc. Dean for Research, Sch. of For. Res. B.S., M.S., State Univ. Coll. of For. at Syracuse Univ.; Ph.D., Univ. of Wis.
- Cox, *Chandra D.*, Asst. Prof. of Design. B.A., Hampton Inst.; M.F.A., Ohio State Univ.
- Cox, *Ellen F.*, Asst. Prof. of Econ. & Bus. B.A., Univ. of Santa Clara; M.B.A., Ph.D., Univ. of Calif. at Berkeley.
- Cox, *Frederick Russell*, Prof. of Soil Sci. B.S., M.S., Univ. of Neb.; Ph.D., N.C. State Univ.
- Craig, *Harris Bradford*, Prof. of Food Sci., Assoc. Dir. of Acad. Aff. for the Sch. of Agri. & Life Sci., & Dir. of the Agri. Inst. B.S., Clemson Coll.; M.S., N.C. State Univ.; Ph.D., Mich. State Univ.
- Crane, *Stephen W.*, Prof. & Head of Comp. Ani. & Special Spec. Med. B.S., D.V.M., Univ. of Calif. at Davis.
- Cranford, *Chrys A.*, Lib. & Asst. Coord., Curriculum Mat. Ctr. B.A., M.A., Appalachian State Univ.
- Crawford, *John Kent*, Adj. Asst. Prof. of Pol. Sci. & Pub. Adm. B.S., N.C. State Univ.; M.S., Ph.D., Penn. State Univ.
- Cribbins, *Paul Day*, Prof. of Civ. Engr. B.S., U.S. Merch. Mar. Acad.; B.S.C.E., Univ. of Ala.; M.S.C.E., Ph.D., Purdue Univ.
- Crickenberger, *Roger Gilbert*, Assoc. Prof. of Ani. Sci. & Spec.-In-Charge, Ext. Ani. Husb. B.S., Va. Polytech. Inst. & State Univ.; Ph.D., Mich. State Univ.
- Crisp, *James Ernest*, Asst. Prof. of Hist. B.A., Rice Univ.; M.Phil., Ph.D., Yale Univ.
- Croom, *Warren James, Jr.*, Assoc. Prof. of Ani. Sci. & Anat., Physiol. Sci. & Radiol. B.S., Univ. of Mo. at Columbia; M.S., Ph.D., Univ. of Ill. at Urbana.
- Cross, *Ford A.*, Adj. Prof. of Zool. B.A., Mount Union Coll.; M.S., Ph.D., Ore. State Univ.
- Crossland, *Cathy Lee*, Assoc. Prof. of Curr. & Instr. B.A., Va. Commonwealth Univ.; M.S., Ed.D., Univ. of Tenn.
- Crow, *Jeffrey J.*, Adj. Asst. Prof. of Hist. B.A., Ohio State Univ.; M.A., Univ. of Akron; Ph.D., Duke Univ.
- Crow, *Johnny Lee*, Asst. Prof. in Occup. Ed. B.S., M.S., Ed.D., N.C. State Univ.
- Crowder, *James Uriah*, Adj. Asst. Prof. of Mech. & Aero. Engr. B.S.M.E., M.S., Ph.D., N.C. State Univ.
- Crowder, *Larry B.*, Asst. Prof. of Zool. B.A., Calif. State Univ. at Fresno; M.S., Ph.D., Mich. State Univ.
- Crowe, *Clayton T.*, Adj. Prof. of Mech. & Aero. Engr. B.S., Univ. of Wash.; Ph.D., Univ. of Mich.
- Crump, *Kelly Raygene*, Dir. of Cont. Ed. & Prof. Dev. B.S., N.C. State Univ.
- Crutcher, *Harold Lee*, Adj. Assoc. Prof. of Stat. B.S., B.A., Durant Teachers Coll.; M.S., Ph.D., N.Y. Univ.
- Cuculo, *John Anthony*, Celanese Corp. Prof. in Fiber & Polymer Sci. B.S., Brown Univ.; Ph.D., Duke Univ.
- Cudd, *John Franklin, Jr.*, Dir. of Summ. Sess. & Asst. Dir. of Cont. Ed. B.A., M.Ed., N.C. State Univ.
- Culbreth, *Charles T., Jr.*, Asst. Prof. of Ind. Engr. B.S., M.Ec., Ph.D., N.C. State Univ.
- Culkin, *David Francis*, Asst. Prof. of Rec. Res. Adm. B.S., M.S., Univ. of Ill.; Ph.D., Univ. of Ore.
- Cullen, *John Michael*, Asst. Prof. of Microbiol., Path., & Parasit. A.B., V.M.D., Univ. of Penn.
- Cullinan, *Douglas A.*, Assoc. Prof. of Curr. & Instr. B.A., M.Ed., Ed.D., Univ. of Va.
- Cummings, *George August*, Prof. of Soil Sci. B.S., M.S., Ph.D., Purdue Univ.
- Cuneo, *Jeffrey A.*, Instr. in Aero. Studies. B.A., Univ. of Notre Dame; M.B.A., Univ. of Mo.
- Cunningham, *Joseph William*, Prof. of Psych. B.S., Fla. State Univ.; M.S., N.C. State Univ.; Ph.D., Purdue Univ.
- Cunningham, *Mary Kathleen*, Instr. in Rel. B.A., Carleton Coll.; M.A., M.Phil., M.Div., Yale Univ.
- Cunningham, *Michael W.*, Res. Asst. in For. B.S., Okla. State Univ.; M.S., Tex. A & M Univ., Ph.D., N.C. State Univ.
- Cupitt, *Mary Marsha*, Lect. in Math. B.A., Belhaven Coll.; M.A., N.C. State Univ.
- Curtin, *Terrence Michael*, Dean of Sch. of Vet. Med. & Prof. of Anat., Physiol. Sci. and Radiol. B.S., D.V.M., Univ. of Minn.; M.S., Ph.D., Purdue Univ.
- Curtin, *Thomas Brian*, Adj. Asst. Prof. of Mar., Earth & Atmos. Sci. B.S., Boston Coll.; M.S., Ore. State Univ.; Ph.D., Univ. of Miami.
- Curtis, *Stephanie Elise*, Asst. Prof. of Gen. B.S., Fla. State Univ.; Ph.D., Univ. of Ga.
- Daeschel, *Mark A.*, Asst. Prof. (USDA) of Food Sci. B.A., State Univ. of N.Y.; M.S., Univ. of Tenn.; Ph.D., N.C. State Univ.
- Daggerhart, *James A., Jr.*, Adj. Asst. Prof. of Mech. and Aero. Engr. B.S., Ph.D., N.C. State Univ.
- Dahle, *Robert David*, Prof. of Econ. B.S., M.S., Penn. State Univ.; Ph.D., N.C. State Univ.
- Dallas, *Walter Southwick*, Adj. Asst. Prof. of Microbiol. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of Wash.
- Dalton, *Deborah W.*, Asst. Prof. of Land. Arch. B.A., M.L.A., Univ. of Penn.
- Danby, *John Michael Anthony*, Prof. of Math. B.A., M.A., Christ Church, Oxford; Ph.D., Manchester Univ.

- Danehower, David A.*, Asst. Prof. of Crop Sci. B.A., Erskine Coll.; Ph.D., N.C. State Univ.
- Daniel, Dorsey Wade*, Ext. Agron. Spec. in Crop Sci. B.S., N.C. State Univ.
- Daniels, Jerry Monroe*, Assoc. Prof. of Phys. Ed. B.S., M.A., Appalachian State Univ.
- Danielson, Leon E.*, Prof. of Econ. & Bus. B.S., Univ. of Wis.; M.S., N.C. State Univ.; M.A., Ph.D., Univ. of Calif. at Berkeley.
- Daub, Margaret E.*, Asst. Prof. of Plant Path. B.A., Coll. of Wooster; Ph.D., Univ. of Wis. at Madison.
- Dauterman, Walter Carl*, Prof. of Entom. B.S., M.S., Rutgers Univ.; Ph.D., Univ. of Wis.
- Davenport, Donald Gould*, Prof. of Ani. Sci. B.S., Univ. of Mass.; M.S., Ph.D., Cornell Univ.
- Davey, Charles Bingham*, Carl Alwin Schenck Prof. of For. & Prof. of Soil Sci. & Plant Path. B.S., N.Y. State Coll. of For.; M.S., Ph.D., Univ. of Wis.
- David, Joseph W.*, Asst. Prof. of Mech. & Aero. Engr. B.S., M.S., Ph.D., Va. Polytech. Inst. & State Univ.
- Davis, Adam Clarke*, Assoc. Prof. of Soc. & Anth. B.S., Univ. of N.C. at Chapel Hill; M.S., N.C. State Univ.; Ph.D., Duke Univ.
- Davis, Edward W.*, Assoc. Prof. of Comp. Sci. B.S., M.S., Univ. of Akron; Ph.D., Univ. of Ill.
- Davis, Jerry Mallory*, Prof. of Mar., Earth and Atmos. Sci. & Plant Path. B.S., N.C. State Univ.; M.S., Univ. of Mich.; Ph.D., Ohio State Univ.
- Davis, Jinnie Yeh*, Lib. & Asst. Head of Mono. Cat. A.B., A.M.L.S., Univ. of Mich.; M.H.S. Auburn Univ.; Ph.D., Indiana Univ.
- Davis, Judith Anne*, Asst. Prof. of Occ. Ed. B.S., High Point Coll.; M.T., Bowman Gray School of Med.; M.Ed., Ph.D., Univ. of Fla.
- Davis, Kathryn Louise*, Lect. in Phys. Ed. B.S., Univ. of N.C. at Greensboro.
- Davis, Michael A.*, Ext. Asst. Prof. of 4-H Youth Dev. & Assoc. State 4-H Leader & Spec.-In-Chg. B.A., Univ. of N.C. at Chapel Hill; M.Ed., Ed.D., N.C. State Univ.
- Davis, Patricia Ann*, Handicapped Coord., Stud. Aff. B.A., Univ. of N.C. at Greensboro.
- Davis, Robert Foster*, Prof. of Mat. Sci. & Engr. B.S., N.C. State Univ.; M.S., Penn. State Univ.; Ph.D., Univ. of Calif. at Berkeley.
- Davis, Robert L.*, Ext. Assoc. Prof. of Crop Sci. B.S., Berea Coll.; M.S., Univ. of Tenn.
- Davis, William Robert*, Prof. of Phys. B.S., M.S., Univ. of Okla.; Ph.D., Univ. of Göttingen (Germany).
- Davison, Harold Leroy*, Lect. in Math. B.S., U.S. Coast Guard Acad.; M.A.T., Duke Univ.
- Deal, Earl Lackey, Jr.*, Ext. Assoc. Prof. of Wood & Paper Sci. & Coor., Wood Util. Prog. B.S.F., N.C. State Univ.; M.S.F., Univ. of Ga.; Ph.D., N.C. State Univ.
- Dean, Julie A.*, Ext. Spec. in Ind. Ext. Serv. B.A., Meredith Coll.
- DeAngelis, Jack Douglas*, Ext. Spec. in Entom. B.A., Miami Univ.; M.S., New Mex. State Univ.; Ph.D., Ore. State Univ.
- Dearmon, Mark B.*, Media Prod. Ed. in Agri. Comm. B.A., Univ. of N.C. at Chapel Hill.
- DeArmond, Anna*, Res. Assoc. in Chem. B.S., Charles Univ. (Prague); Ph.D., Heyrovsky Inst. of Czechoslovakia.
- DeArmond, M. Keith*, Prof. of Chem. B.S., Depauw Univ.; Ph.D., Univ. of Ariz.
- DeBarr, Gary Lee*, Adj. Assoc. Prof. of For. B.S., M.S., Univ. of Ill.; Ph.D., Univ. of Ga.
- Debo, Roger Lewis*, Asst. Swim Coach. B.A., Cornell Coll.; M.E., N.C. State Univ.
- DeBruhl, Ray Franklin*, Adj. Lecturer in Civ. Engr. B.S., Univ. of S. C.; M.C.E., N.C. State Univ.
- DeBusscher, Eduard Victor*, Assoc. Prof. of Microbiol., Path. & Parasit. K.W., State Univ. of Ghent; M.S., Ph.D., Univ. of Wis. at Madison; D.V.M., State Univ. of Ghent.
- Decker, Susan C.*, Assoc. Dir. of Housing & Resid. Life. B.S., M.A., Univ. of S. Fla.
- De Grand, Alexander Joseph*, Prof. and Head of Hist. B.S.F.S., Georgetown Univ.; M.A., Johns Hopkins Univ.; Ph.D., Univ. of Chicago.
- De Hertogh, August A.*, Prof. & Head of Hort. Sci. B.S., M.S., N.C. State Univ.; Ph.D., Ore. State Univ.
- Deitz, Lewis L.*, Assoc. Prof. of Entom. B.S., M.S., Univ. of Md.; Ph.D., N.C. State Univ.
- DeJarnette, Fred Roark*, Prof. of Mech. & Aero. Engr. B.S., M.S., Ga. Inst. of Tech.; Ph.D., Va. Polytech. Inst. & State Univ.
- DeJoy, Daniel Allen*, Asst. Prof. of Speech-Comm. B.A., Westminster Coll.; M.A., Ph.D., Northwestern Univ.
- Della Fave, L. Richard*, Prof. of Soc. & Anth. B.A., N.Y. Univ.; M.A., Ph.D., Univ. of Mass.
- Dellinger, Sandra A.*, Ext. Spec. in Housing & House Furn. B.A., M.S., Univ. of N.C. at Greensboro.
- DeLuca, V. William*, Asst. Prof. of Occ. Ed. B.S., Calif. Univ. of Penn.; M.A., Ed.D., W. Va. Univ.
- DeMaria, Mark*, Asst. Prof. of Mar., Earth & Atmos. Sci. B.S., Fla. State Univ.; M.S., Ph.D., Colo. State Univ.
- Demartini, Robert J.*, Adj. Prof. of Wood & Paper Sci. S.B., Mass. Inst. of Tech.
- DeMaster, David J.*, Assoc. Prof. of Mar., Earth & Atmos. Sci. B.S., Univ. of Wis. at Madison; M.S., Ph.D., Yale Univ.
- Denig, Joseph*, Ext. Asst. Prof. of Wood & Paper Sci. & Ext. For. Res. Spec. B.S., Mich. Tech. Univ.; M.S., Ph.D., Va. Polytech. Inst. & State Univ.
- Denke, Mark S.*, Assoc. Dir., Housing & Res. Life. B.S., Penn. State Univ.; M.S., Shippensburg Univ.
- Denton, Harry Paul*, Asst. Prof. of Soil Sci. B.S., M.S., Univ. of Tenn.; Ph.D., N.C. State Univ.
- de Steiguer, Joseph Edward*, Asst. Prof. (USFS) of For. B.B.A., Lamar Univ.; M.F., Stephen F. Austin State Univ.; Ph.D., Texas A&M Univ.
- Devine, Hugh A., Jr.*, Prof. of Rec. Res. Adm. B.S., M.S., Ph.D., Penn. State Univ.
- Dew, Paul Edward*, Ext. Prof. of Adult & Comm. Coll. Ed. & Asst. Dir., Agri. Ext. Serv., Cnty Oper. B.S., M.E., Ed.D., N.C. State Univ.
- Dewhirst, Mark W.*, Adj. Asst. Prof. of Rad. B.S., Univ. of Arizona; D.V.M., Ph.D., Colo. State Univ.
- DeWitt, Dana*, Lect. in Engl. B.A., Univ. of Calif. at Los Angeles.
- DeWitt, James Louis*, Asst. Prof. of Phys. Ed. B.S., M.S., Va. Polytech. Inst. & State Univ.
- DeYoung, David J.*, Assoc. Prof. of Comp. Ani. & Special Spec. Med. B.S., D.V.M., Mich. State Univ.
- Dhillon, Sukraj Singh*, Res. in Bot. B.Sc., M.Sc., Punjab Univ.; M.F.S., Yale Univ.; Ph.D., Va. Polytech. Inst. & State Univ.
- Dial, Gary D.*, Asst. Prof. of Food Ani. & Equine Med. B.S., M.S., Ph.D., D.V.M., Univ. of Ill.
- DiBucci, Cheryl Ann*, Asst. Dir., Stud. Housing. B.S. Ed., M.S., Shippensburg State Coll.
- Dickens, James William*, Prof. (USDA) of Biol. & Agri. Engr. B.S., M.S., N.C. State Univ.
- Dickerson, Henry E.*, Lect. in Engl. B.A., M.A., N.C. State Univ.
- Dickey, David Alan*, Assoc. Prof. of Stat. A.B., M.S., Miami Univ.; Ph.D., Iowa State Univ.
- Diehl, Sherra E.*, Assoc. Prof. of Elect. & Comp. Engr. A.B., Mt. Holyoke Coll.; M.A., Univ. of Wis. at Madison; Ph.D., Univ. of N.C. at Chapel Hill.
- Dietz, E. Jacqueline*, Assoc. Prof. of Stat. A.B., Oberlin Coll.; M.S., Ph.D., Univ. of Conn.
- Dillman, Richard Carl*, Prof. of Microbiol., Path. & Parasit. B.S., D.V.M., Iowa State Univ.; M.S., Ph.D., Kan. State Univ.
- Dillon, Linda Schmulle*, Assoc. Prof. of Occup. Ed. B.S., Iowa State Univ.; M.S., Univ. of N.C. at Greensboro; Ph.D., Ohio State Univ.

- DiPaola, Joseph M.*, Assoc. Prof. of Crop Sci. B.S., Rutgers Univ.; M.S., Ph.D., Tex. A & M Univ.
- Dixon, George Richard*, Assoc. Dir. of Admiss. B.A., M.P.A., N.C. State Univ.
- Dobrogosz, Walter Jerome*, Prof. of Microbiol. B.S., M.S., Ph.D., Penn. State Univ.
- Doerr, Phillip David*, Prof. of Zool. & For. B.A., Colo. Coll.; M.S., Colo. State Univ.; Ph.D., Univ. of Wis.
- Doggett, Wesley Osborne*, Prof. of Phys. B.N.E., B.E.E., N.C. State Univ.; M.S., Ph.D., Univ. of Calif. at Berkeley.
- Dolce, Carl John*, Dean & Prof. of Ed. A.B., Tulane Univ.; M.Ed., Loyola Univ.; Ed.D., Harvard Univ.
- Donaghy, Sandra Biggs*, Assoc. Statistician in Stat. & Zool. B.A., Univ. of N.C. at Greensboro; M.S., N.C. State Univ.
- Donahue, Jeffrey Kevin*, Res. Asst. in For. B.S.F., Purdue Univ.
- Donaldson, R. Alan*, Assoc. Prof. of Text. Mgmt. & Tech. Associateship in Text. Design, Scottish College of Textiles (Scotland).
- Donaldson, William Emmert*, William Neal Reynolds Prof. of Poul. Sci. B.S., M.S., Ph.D., Univ. of Md.
- Dorff, Robert H.*, Assoc. Prof. of Pol. Sci. & Pub. Adm. B.A., Colo. Coll.; M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Doster, Joseph Michael*, Asst. Prof. of Nucl. Engr. B.S., Ph.D., N.C. State Univ.
- Dougherty, William George*, Asst. Prof. of Plant Path. & Microb. A.B., Rutgers Coll.; M.S., Ph.D., Univ. of Fla.
- Douglas, Robert Alden*, Prof. of Civ. Engr. B.S., M.S., Ph.D., Purdue Univ.
- Dow, Thomas Alva*, Prof. of Mech. and Aero. Engr. B.S., Va. Polytech. Inst. & State Univ.; M.S., Case Inst. of Tech.; Ph.D., Northwestern Univ.
- Downs, Murray Scott*, Prof. of Hist. & Assoc. Prov. B.A., Randolph-Macon Coll.; M.A., Ph.D., Duke Univ.
- Downs, Robert Jack*, Prof. of Bot. & Hort. Sci. & Dir. of the Phytotron. B.S., M.S., Ph.D., Geo. Wash. Univ.
- Downs, Virginia Craig*, Asst. Prof. of Engl. B.A., Women's Coll. of the Univ. of N.C. at Greensboro; M.A., Duke Univ.
- Drabick, Matthew Fred*, Teaching Tech. in Speech-Comm. B.A., N.C. State Univ.
- Dressing, Steven Andrew*, Ext. Spec. in Biol. & Agr. Engr. B.A., Eisenhower Coll.; M.S.P.H., Univ. of N.C. at Chapel Hill.
- Drewes, Donald William*, Prof. of Psych. B.S., Iowa State Coll.; M.A., State Univ. of Iowa; Ph.D., Purdue Univ.
- Drews, Frederick Richard*, Prof. of Phys. Ed. Ed.B., Univ. of Buffalo; M.S., Pe.D., Indiana Univ.
- Driggers, Louis Bynum*, Ext. Prof. of Biol. & Agri. Engr. B.S., Clemson Univ.; M.S., Va. Polytech. Inst. & State Univ.
- DuBose, Harry Maz*, Instr. in Mil. Sci. B.S., M.S., Clemson Univ.
- Duncan, Harry Ernest*, Prof. of Plant Path. B.S., M.S., Ph.D., W. Va. Univ.
- Dunn, Joseph C.*, Prof. of Math. B.Aero. Engr., M.S., Polytech. Inst. of Brooklyn; Ph.D., Adelphi Univ.
- Dunn, Sandra Crowe*, Lib. & Monographic Cat. Lib. B.A., N.C. Central Univ.; M.S.L.S., Atlanta Univ.
- Dunning, John A.*, Res. Asst. (USDA) in Bot. B.A., Miami Univ.
- Dunphy, Edward James*, Prof. of Crop Sci. B.S., M.S., Univ. of Ill.; Ph.D., Iowa State Univ.
- Durant, Jack Davis*, Prof. of Engl. A.B., Maryville College; M.A., Ph.D., Univ. of Tenn.
- Durfee, Michael Fulk*, Adj. Asst. Prof. of Curr. & Instr. B.A., Ohio State Univ.; M.D., Univ. of Va.; M.P.H., Univ. of N.C. at Chapel Hill.
- Dutrow, George F.*, Adj. Prof. of For. B.S., M.F., Ph.D., Duke Univ.
- Dutton, John C.*, Assoc. Prof. of Econ. & Bus. A.B., Harvard Coll.; M.A. (Hist.), M.A.T., M.A. (Econ.), Ph.D., Duke Univ.
- Dvorak, William S.*, Res. Asst. & Dir. of the Central Amer. & Conf. Res. Coop. B.S., Mich. State Univ.
- Dwoyer, Douglas L.*, Adj. Assoc. Prof. of Mech. & Aero. Engr. B.S., M.S., Ph.D., Va. Polytech. Inst. & State Univ.
- Dykstra, Michael Jack*, Electron Microscopy Dir., Microbiol., Path. & Parasit. Sci. & Radiol. B.S., M.S., Univ. of Iowa; M.S., Univ. of Ga.; Ph.D., Univ. of N.C. at Chapel Hill.
- Eaddy, Donald Workman*, Adj. Assoc. Prof. of Soil Sci. B.S., M.S., Clemson Univ.; Ph.D., N.C. State Univ.
- Eargle, Fred L., Sr.*, Engr. Ext. Spec. in Ind. Ext. Serv. B.S., M.Ed., N.C. State Univ.
- Easley, James E., Jr.*, Prof. of Econ. M.A., S. Methodist Univ.; B.A., Ph.D., N.C. State Univ.
- Easter, William Taylor*, Assoc. Prof. & Assoc. Head of Elect. & Comp. Engr. B.S., N.C. State Univ.; M.S., Carnegie Inst. of Tech.
- Easterling, William Donald*, Swim. Coach. B.S., M.E., Tex. Christian Univ.
- Eberhardt, Allen Craig*, Assoc. Prof. of Mech. & Aero. Engr. B.S., M.S., Ph.D., N.C. State Univ.
- Ebisuzaki, Yukiko*, Assoc. Prof. of Chem. B.S., M.S., Univ. of W. Ontario; Ph.D., Indiana Univ.
- Echandi, Eddie*, Prof. of Plant Path. B.S., College of Agri., Univ. of Costa Rica; M.A., Inter-American Inst. of Agri. Sci. (Turrialba, Costa Rica); Ph.D., Univ. of Wis. at Madison.
- Eckertlin, Herbert Martin*, Ext. Spec. & Assoc. Prof. of Mech. & Aero. Engr. B.S., Va. Polytech. Inst. & State Univ.; M.S., Ph.D., N.C. State Univ.
- Edens, Frank Wesley*, Prof. of Poul. Sci. B.S., M.S., Va. Polytech. Inst. & State Univ.; Ph.D., Univ. of Ga.
- Edwards, John Auert*, Prof. of Mech. & Aero. Engr. B.S.M.E., M.S., N.C. State Univ.; Ph.D., Purdue Univ.
- Edwards, Louis Laird*, Adj. Prof. of Wood & Paper Sci. B.S., Rensselaer Polytech. Inst.; M.S., Univ. of Del.; Ph.D., Univ. of Idaho.
- Edwards, Robert Louis*, Super. & Sr. Engr. Ext. Spec. in Ind. Ext. Serv. B.M.E., M.S., N.C. State Univ.
- Edwards, Samuel Reese, Jr.*, News Ed. (Radio) in Agri. Comm. A.B., Methodist College.
- Eickhoff, William Dean*, Prof. of Econ. & Bus. B.S., M.S., Univ. of Mo.; Ph.D., Ohio State Univ.
- Eischen, Jeffrey W.*, Asst. Prof. of Mech. & Aero. Engr. B.S., Univ. of Calif. at L.A.; M.S., Ph.D., Stanford Univ.
- Eisen, Eugene J.*, Prof. of Ani. Sci. & Gen. B.S.A., Univ. of Ga.; M.S., Ph.D., Purdue Univ.
- Ekwall, John A.*, Lect. in Ind. Engr. Diploma Engr., Finnish Inst. of Tech.
- Eldridge, Lee Ann*, Lect. in Math. B.S., Campbell Coll.; M.Ed., N.C. State Univ.
- Eling, Thomas Edward*, Adj. Assoc. Prof. of Anat., Physiol. Sci. & Radiol. B.S., M.S., Univ. of Cincinnati; Ph.D., Univ. of Ala. at Birmingham.
- Elkan, Gerald Hugh*, Prof. of Microbiol. B.A., Brigham Young Univ.; M.S., Penn. State Univ.; Ph.D., Va. Polytech. Inst. & State Univ.
- Elleman, Charlotte Ann*, Lect. in Speech-Comm. B.A., Denison Univ.; M.A., Ohio State Univ.
- Elleman, Thomas Smith*, Prof. of Nuc. Engr. & Assoc. Dean for Res., Sch. of Engr. B.S., Denison Univ.; Ph.D., Iowa State Univ.
- Elliott, Lee Titus*, Lect. in Engl., B.A., Univ. of N.C. at Chapel Hill; M.A., Hollins Coll.; M.F.A., Univ. of Ark.
- Ellner, Stephen P.*, Asst. Prof. of Stat. B.A., Univ. of Calif. at Berkeley; Ph.D., Cornell Univ.
- Ellovich, Risa Sue*, Asst. Prof. of Soc. & Anth. B.A., Chatham Coll.; M.A., Ph.D., Indiana Univ.

- Ellwood, Eric Louis*, Dean of Sch. of For. Res. & Prof. of Wood & Paper Sci., B.Sc., M.Sc., Univ. of Melbourne (Australia); Ph.D., Yale Univ.
- Elmaghraby, Salah E.*, Univ. Prof. of Oper. Res. & Ind. Engr. & Dir. Oper. Res. B.Sc., Cairo Univ.; M.Sc., Ohio State Univ.; Ph.D., Cornell Univ.
- ElMasry, Nadia A.*, Asst. Prof. of Mat. Sci. & Engr. B.S., M.S., Alexandria Univ.; Ph.D., N.C. State Univ.
- El-Shiekh, Aly H. M.*, Prof. of Text. Mgmt. & Tech. B.Sc., Alexandria Univ. (Egypt); M.S., M.E., D.Sc., Mass. Inst. of Tech.
- Ely, John Frederick*, Prof. of Civ. Engr. B.S.C.E., Purdue Univ.; M.S., Ph.D., Northwestern Univ.
- Emery, Donald Allen*, Prof. of Crop Sci. & Gen. & Teach. Coord. B.S., M.S., Univ. of New Hamp.; Ph.D., Univ. of Wis.
- Emigh, Ted H.*, Assoc. Prof. of Gen. & Stat. B.A., Carleton Coll.; M.S., Ph.D., Iowa State Univ.
- Emory, Frank E.*, Housing Spec., Univ. Ext. & Asst. Dir., Cntr. for Urban Aff. & Comm. Serv. Cntr. B.S., N.C. A & T State Univ.; M.A. Ed., N.C. State Univ.
- Engel, Elliot David*, Assoc. Prof. of Engl. B.A., Indiana Univ.; M.A., Ph.D., Univ. of Calif. at L.A.
- Ensor, David S.*, Adj. Assoc. Prof. of Chem. Engr. B.S., Wash. State Univ.; M.S., Ph.D., Univ. of Wash.
- Erchul, William P.*, Asst. Prof. of Psych. B.A., Univ. of Wis. at Madison; Ph.D., Univ. of Texas at Austin.
- Erickson, Edward Walter*, Prof. of Econ. & Bus. & Dir., Ctr. for Econ. & Bus. Stud. B.A., Penn. State Univ.; Ph.D., Vanderbilt Univ.
- Erwin, Jim Phillip*, Adj. Lect. in Elect. & Comp. Engr. B.S., Univ. of Tenn.
- Esbenshade, Kenneth Lee*, Assoc. Prof. of Ani. Sci. B.S., Del. Valley Coll.; M.S., Ph.D., Purdue Univ.
- Eskridge, Robert Edmund*, Adj. Assoc. Prof. of Mar., Earth, & Atmos. Sci. B.S., Coll. of Charleston; M.S., Univ. of Neb.; Ph.D., Texas A&M Univ.
- Esposito, Samuel*, Head Baseball Coach. B.S., Indiana Univ.
- Estes, Edmund Anthony*, Assoc. Prof. of Econ. & Bus. B.A., Univ. of Md.; M.B.A., Univ. of Baltimore; Ph.D., Wash. State Univ.
- Evans, James L., Jr.*, Res. Asst. in Elect. & Comp. Engr. B.S., Brigham Young Univ.
- Evans, Michael Jon*, Prof. of Math. & Undergrad. Admin. B.S., Eastern Ill. Univ.; M.S., Ph.D., Mich. State Univ.
- Evans, Robert O. Jr.*, Ext. Spec. in Biol. & Agri. Engr. B.S., M.S., N.C. State Univ.
- Evans, Thomas William*, Asst. Prof. of Phys. Ed. B.S. Ed., Norwich Univ.; M.S., Dir. P.E., Indiana Univ.
- Exum, Herbert A.*, Assoc. Prof. of Counselor Ed. & Assoc. Dean, Sch. of Ed. B.A., Federal City Coll.; M.A., Ph.D., Univ. of Minn.
- Eyck, Carl Orton*, Dir. of Fin. Aid. B.S., M.A., Ohio Univ.
- Fagan, Harry, Jr.*, Staff Phys. in Stud. Health Serv. B.S., Ga. Inst. of Tech.; M.D., Bowman Gray School of Med.
- Fahmy, Abdel-Aziz*, Prof. of Mat. Sci. & Engr. B. Engr., Univ. of Cairo; Ph.D., Univ. of Sheffield (England).
- Fairchild, Erika Schmid*, Assoc. Prof. of Pol. Sci. & Pub. Adm. & Dir. Pub. Adm. B.A., Hunter Coll.; M.A., Yale Univ.; Ph.D., Univ. of Wash.
- Fairman, Lynette A.*, Lect. in Engl. B.S., Univ. of Tenn.; M.A., Iowa State Univ.
- Fantz, Paul Richard*, Assoc. Prof. of Hort. Sci. B.S. Ed., M.S. Ed., S. Ill. Univ.; M.A., Wash. Univ.; Ph.D., Univ. of Fla.
- Farid, Foad*, Asst. Prof. of Civ. Engr. B.S., M.S., Univ. of Tehran (Iran); Ph.D., Univ. of Ill. at Urbana.
- Farmer, Edgar I.*, Assoc. Prof. of Occup. Ed. B.S., Norfolk State Coll.; M.A., Hampton Inst.; Ed.D., Penn. State Univ.
- Farrell, Richard H.*, Bus. Mgr. of Athl.
- Farrier, Maurice Hugh*, Prof. of Entom. & For. B.S., M.S., Iowa State Coll.; Ph.D., N.C. State Univ.
- Fathi, Yahya*, Asst. Prof. of Ind. Engr. B.S.I.E., Arya-Mehr Univ. of Tech. (Tehran); M.S., Ph.D., Univ. of Mich.
- Fathy, Dariush*, Adj. Asst. Prof. of Mat. Sci. & Engr. B.S., Univ. of Essex; M.S., Ph.D., Cambridge Univ.
- Faulkner, Gary D.*, Assoc. Prof. of Math. B.S., Ga. State Univ.; M.S., Univ. of S. C.; Ph.D., Ga. Inst. of Tech.
- Fauntleroy, Amassa*, Prof. of Math. A.B., Johns Hopkins Univ.; M.S., Ph.D., Northwestern Univ.
- Fearn, Robert Morcom*, Prof. of Econ. B.Sc., Ohio Univ. Coll. of Commerce; M.A., State College of Wash.; Ph.D., Univ. of Chicago.
- Featherstone, Douglas B.*, Assoc. Dir. of Alumni Rel. B.A., N.C. State Univ.
- Feaver, Marianne N.*, Assoc. Prof. of Zool. B.S., M.S., Univ. of Ill.; Ph.D., Univ. of Mich.
- Federico, Lienne C.*, Acad. Facilitator, Acad. Skills Prog. B.A., Hamilton Coll.; M.A., Univ. of N.C. at Chapel Hill.
- Fedkiw, Peter S.*, Assoc. Prof. of Chem. Engr. B.Ch.E., Univ. of Del.; Ph.D., Univ. of Calif. at Berkeley.
- Feeny, Thomas Paul*, Prof. of For. Lang. & Lit. A.B., M.A., Boston Univ.; Ph.D., Univ. of Va.
- Felder, James Edward*, Adj. Lect. in Comp. Sci. B.S., N.C. State Univ.
- Felder, Richard Mark*, Prof. of Chem. Engr. B.Ch.E., City Coll. of the City Univ. of N.Y.; Ph.D., Princeton Univ.
- Fenner, Gregory P.*, Res. Assoc. in Microbiol. B.S., Elizabeth City State Univ.; M.S., Ph.D., Univ. of Md.
- Fenton, Julie Ann*, Lect. in Engl. B.A., Wright State Univ.; M.A., N.C. State Univ.
- Ferguson, Randolph Lyons*, Adj. Assoc. Prof. of Zool. B.Sc., Cornell Univ.; Ph.D., Fla. State Univ.
- Ferguson, Thomas M.*, Res. Asst., Sch. of Text. B.S., M.S., N.C. State Univ.
- Ferrell, James K.*, Alcoa Prof. of Chem. Engr. & Assoc. Dean for Grad. Prog. B.S., M.S., Univ. of Mo.; Ph.D., N.C. State Univ.
- Ferrell, Ronald E.*, Res. Asst. in Bot. B.S., East Carolina Univ.
- Ferreri, Linda B.*, Asst. Prof. of Econ. & Bus. B.A., Duke Univ.; M.B.A., Ph.D., Case Western Reserve Univ.
- Ferster, Judith*, Assoc. Prof. of Engl. B.A., Smith Coll.; Ph.D., Brown Univ.
- Fetrow, John*, Assoc. Prof. of Food Ani. & Equine Med. B.S., Mass. Inst. of Tech.; V.M.D., M.B.A., Univ. of Pa.
- Ficken, Martin Dale*, Asst. Prof. of Food Ani. & Equine Med. B.Sc., Univ. of Neb.; M.Sc., DVM, Iowa St. Univ.
- Fike, William Thomas, Jr.*, Prof. of Crop Sci. B.S., M.S., Penn. State Univ.; Ph.D., Univ. of Minn.
- Fikry, Mohamed M.*, Sr. Engr. Ext. Spec. in Mech. & Aero. Engr. B.Sc., Univ. of Alexandria; D.I.C., Ph.D., Imperial Coll., London Univ.
- Finch, Nora Lynn*, Assoc. Athl. Dir. B.S. Ed., M.A. Ed., W. Carolina Univ.
- Fingeret, Arlene*, Assoc. Prof. of Adult & Comm. Coll. Ed. B.S., Mass. Inst. of Tech.; M.S., Ph.D., Syracuse Univ.
- Finkel, Karrie*, Asst. Prof. of Design. B.S., M.S., Stanford Univ.
- Finkner, Alva Leroy*, Adj. Prof. of Stat. B.S., Colo. A&M Coll.; M.S., Kan. State Coll.; Ph.D., N.C. State Univ.
- Fischer, Thea Joan*, Lib. & Vet. Med. Lib. B.S., Cornell Univ.; M.L.S. Drexel Univ.
- Fisher, Douglas*, Prof. of Econ. & Bus. B.A., M.A., Univ. of Pitt.; Ph.D., Univ. of Chicago.
- Fisher, Dwight S.*, Asst. Prof. (USDA) of Crop Sci. B.S., Univ. of Ariz.; M.S., Ph.D., N.C. State Univ.
- Fisher, Edward L.*, Asst. Prof. of Ind. Engr. B.S.I.E., M.S.I.E., West Va. Univ.; Ph.D., Purdue Univ.

- Fisher, Howard K., Jr.*, Prof. of Mil. Sci. B.S., Penn. State Univ.; M.A., Univ. of Ala.
- Fisher, John S.*, Prof. of Civ. Engr. B.S.M.E., Univ. of Civ. Fla.; M.S.M.E., Univ. of Miami; Ph.D., Mass. Inst. of Tech.
- Fisher, Mark E.*, Lect. in Econ. & Bus. B.A., Univ. of Calif. at Santa Barbara; M.B.A., Univ. of Chicago.
- Fites, Roger Carl*, Prof. of Bot. B.S., Purdue Univ.; M.S., Ph.D., Univ. of Ill.
- Fitzgerald, Walter Curtis, Jr.*, Assoc. Prof. & Asst. Head of Phil. & Rel. B.S., Wake Forest Univ.; B.D., S.Baptist Theol. Sem.
- Flammer, Kevin*, Asst. Prof. of Comp. Ani. & Special Spec. Med. B.A., Univ. of Calif. at L.A.; D.V.M., Univ. of Calif. at Davis.
- Flath, David Joseph*, Assoc. Prof. of Econ. & Bus. B.A., S.Methodist Univ.; M.A., Ph.D., Univ. of Calif. at L.A.
- Fleisher, Lloyd Norman*, Asst. Prof. of Anat., Physiol. Sci., and Radiol. B.A., Brooklyn Coll.; Ph.D., City Univ. of N.Y.
- Fleming, Henry Pridgen*, Prof. (USDA) of Food Sci. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of Ill.
- Fleming, Sherrill Anne*, Asst. Prof. of Food Ani. & Equine Med. D.V.M., Ontario Vet. College.
- Fletcher, Gary Yates*, Asst. Prof. of Comp. Sci. B.S., Davidson Coll.; M.A., Ph.D., N.C. State Univ.
- Flood, Walter A.*, Adj. Prof. of Elect. & Comp. Engr. B.E.E., M.E.E., Ph.D., Cornell Univ.
- Flora, Christine L.*, Adj. Lect. in Engl. B.A., M.A., Univ. of Mich.
- Flory, Joseph Roland*, Ext. 4-H & Youth Spec. B.S., M.S., Kan. State Univ.
- Flowers, James L.*, Asst. Prof. of Occ. Ed. B.S., Univ. of Tenn.; M.A., W. Ky. Univ.; Ph.D., Univ. of Ill. at Urbana.
- Fodor, Ronald Victor*, Assoc. Prof. of Mar., Earth & Atmos. Sci. B.S., Ohio Univ.; M.S., Ariz. State Univ.; Ph.D., Univ. of N. Mex.
- Foegeding, Edward Allen*, Asst. Prof. of Food Sci. B.S., M.S., Univ. of Mo.; Ph.D., Univ. of Minn.
- Foegeding, Peggy Matthews*, Asst. Prof. of Food Sci. B.S., M.S., Univ. of Mo.; Ph.D., Univ. of Minn.
- Fonteno, William Carl, III*, Assoc. Prof. of Hort. Sci. B.A., M.A., Univ. of Tex.; Ph.D., Tex. A & M Univ.
- Foot, Vincent M.*, Prof. & Head of Prod. Visual Design. B.S., Univ. of Cincinnati.
- Forbes, Joan W.*, Counselor, Career Plan. & Placement Ctr. B.S., Towson State Univ.; M.Ed., N.C. State Univ.
- Ford, Richard Banbury*, Assoc. Prof. of Comp. Ani. & Special Spec. Med. B.S., M.S., D.V.M., Ohio State Univ.
- Fornaro, Gene F.*, Engr. Ext. Spec., Ind. Ext. Serv. B.S., M.S., Penn. State Univ.
- Fornaro, Robert Joseph*, Assoc. Prof. of Comp. Sci. B.A., St. Vincent Coll.; M.A., Ph.D., Penn. State Univ.
- Fornes, Raymond Earl*, Prof. of Phys. & Assoc. Dean, Graduate School. A.B., E. Carolina Univ.; Ph.D., N.C. State Univ.
- Fostel, Gary N.*, Instr. in Comp. Sci. B.S., Mass. Inst. of Tech.
- Fouts, James R.*, Adj. Prof. of Entom. & Tox. B.S., Ph.D., Northwestern Univ.
- Fox, Barbara Jeanne*, Assoc. Prof. of Curr. & Instr. B.A., M.S., Ariz. State Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- Frampton, Lewis John*, Asst. Prof. of For. B.S., Univ. of Ga.; M.S., Univ. of Fl.; Ph.D., N.C. State Univ.
- Francis, Florence Irving*, Asst. Dir. of Fin. Aid. A.B., Spelman Coll.; M.B.A., Univ. of Chicago; M.Ed., N.C. State Univ.
- Franco, Elsa N.*, Asst. to Chief-of-Party, Agri. Res. Serv.
- Franke, John Erwin*, Assoc. Prof. of Math. & Grad. Administrator B.A., Luther Coll.; M.S., Ph.D., Northwestern Univ.
- Franklin, Edward Carlyle*, Prof. of For. M.S., Univ. of Calif. at Berkeley; B.S., Ph.D., N.C. State Univ.
- Franklin, William Glenwood*, Prof. of Speech-Comm. A.B., Heidelberg Coll.; M.A., Bowling Green State Univ.; Ph.D., Penn. State Univ.
- Frazier, Ann Yarborough*, Ext. Spec. 4-H & Youth Dev. B.S., Univ. of N.C. at Greensboro; M.Ed., N.C. State Univ.
- Frazier, Katherine B.*, Assoc. Prof. of Econ. & Bus. B.S., Appalachian State Univ.; M.B.A., Ph.D., Univ. of S.C.
- Frederick, Douglas J.*, Prof. of For. B.S.F., M.S., W. Va. Univ.; Ph.D., Univ. of Idaho.
- Freedman, Leon David*, Prof. of Chem. B.A., M.A., Ph.D., Johns Hopkins Univ.
- Freeman, Harold S.*, Assoc. Prof. of Text. Chem. B.S., N.C. A & T State Univ.; M.S., Ph.D., N.C. State Univ.
- Freeman, John Frink*, Lect. in Occup. Ed. B.S., M.S., N.C. State Univ.
- Freeman, Karen Jean*, Asst. Women's Basketball Coach. B.S., Canisius College; M.S., E. Kentucky Univ.
- French, Becky R.*, Univ. Counsel. Univ. Res. B.S., S.E. Mo. State Univ.; J.D., Southern Ill. Univ.
- Friedrich, Ralph W.*, Sr. Engr. Ext. Spec. in Ind. Ext. Serv. B.S., Univ. of Texas; M.A., Univ. of Pitts.
- Frushour, Bruce George*, Adj. Assoc. Prof. of Textiles. B.S., Juniata Coll.; M.S., Ph.D., Case West. Res. Univ.
- Frye, Curtis A.*, Asst. Track Coach. B.S., E. Carolina Univ.
- Frye, Terry Edward*, Learning Res. Spec., School of Design. B.S., N.C. State Univ.
- Fulenwider, Robert E.*, Ext. Spec., Ind. Ext. Serv. B.S., Fla. State Univ.
- Fuller, Earl H., Jr.*, Director of Acad. Skills Prog. B.A., Clemson Univ.; M.A., Ed.D., N.C. State Univ.
- Fuller, Frederick J.*, Asst. Prof. of Micro., Pathol. and Para. & Microbiol. B.A., M.S., Ph.D., Univ. of Conn.
- Fuller, Linda Picard*, Lib. & Gen. Serv. Lib. B.A., Univ. of Neb.; M.S., Univ. of N.C. at Chapel Hill.
- Fulp, Ronald Owen*, Prof. of Math. B.S., Wake Forest Univ.; M.A., Univ. of N.C. at Chapel Hill; Ph.D., Auburn Univ.
- Fulton, Robert E.*, Adj. Prof. of Mech. & Aero. Engr. B.S., Auburn Univ.; M.S., Ph.D., Univ. of Ill.
- Funderburg, John B.*, Adj. Prof. of Zool. B.Sc., E. Carolina Univ.; M.Sc., Ph.D., N.C. State Univ.
- Funderlic, Robert E.*, Prof. and Head of Comp. Sci. B.S., Univ. of Notre Dame; Ph.D., Univ. of Tenn.
- Funkhouser, Edward Truman*, Asst. Prof. of Speech-Comm. B.S., Madison Coll.; M.A., Memphis State Univ.; Ph.D., Ohio Univ.
- Gadsby, John E.*, Asst. Prof. of Anat., Physiol. Sci. & Radiol. B.Sc., Univ. of Sussex. Ph.D., Univ. of Cambridge (England).
- Gallagher, Daniel L.*, Res. Assoc. Resources Res. Inst. B.S., M.S., Drexel Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- Gallant, A. Ronald*, Prof. of Econ. & Stat. A.B., San Diego State Coll.; M.B.A., Univ. of Calif. at L.A.; Ph.D., Iowa State Univ.
- Galler, William Sylvan*, Prof. of Civ. Engr. B.S.Ch.E., M.S.San.E., Ill. Inst. of Tech.; Ph.D., Northwestern Univ.
- Galvin, Michael J., Jr.*, Adj. Asst. Prof. of Poul. Sci. B.S., La. State Univ.; Ph.D., Med. College of Ga.
- Garber, Simon Kauffman*, Assoc. Prof. of Soc. & Anth. B.S., M.S., Ph.D., Penn. State Univ.
- Gardner, Randolph Gilbert*, Assoc. Prof. of Hort. Sci. B.S., M.S., Va. Polytech. Inst. & State Univ.; Ph.D., Cornell Univ.
- Gardner, Robin Pierce*, Prof. of Nuc. Engr. & Chem. Engr. B.Ch.E., M.S., N.C. State Univ.; Ph.D., Penn. State Univ.

- Gardner, William E.*, Ext. For. Res. Spec. B.S., N.C. State Univ.
- Garlich, Jimmy Dale*, Prof. of Poul. Sci. B.S., M.S., Univ. of Ill.; Ph.D., Cornell Univ.
- Garoutte, Dennis Ego*, Asst. Prof. of Math. B.S., M.S., Ph.D., Mont. State Univ.
- Garson, G. David*, Prof. of Pol. Sci. & Pub. Adm. & Assoc. Dean for Plan. & Mgmt., School of Hum. & S/S. B.A., Princeton Univ.; Ph.D., Harvard Univ.
- Gebbie, Janet Lynn*, Lib. & Cat. Lib. B.A., Wake Forest Univ.; M.S., Univ. of N.C. at Chapel Hill.
- Gehring, Edward F.*, Asst. Prof. of Elect. & Comp. Engr. B.A., Wayne State Univ.; M.S., Ph.D., Purdue Univ.
- Geiger, Rolland G., Jr.*, Head Track Coach. B.S., Kent State Univ.
- George, Frederick D.*, Adj. Lect. in Comp. Sci. B.S., N.C. State Univ.
- George, Thomas Waller*, Prof. of Text. Engr. & Sci. A.B., Univ. of Mo. at Kansas City; M.A., Univ. of Ill.
- Gerig, Thomas Michael*, Prof. of Stat. A.B., Geo. Wash. Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- Gerler, Edwin Roland, Jr.*, Assoc. Prof. of Counselor Ed. B.S., Concordia Teachers' Coll.; M.S., Bucknell Univ.; Ed.D., Penn. State Univ.
- Gerstner, Eitan*, Asst. Prof. of Econ. & Bus. B.A., Haifa Univ. (Israel); M.A., Phil., Ph.D., Univ. of Calif. at San Diego.
- Getzen, Forrest William*, Prof. of Chem. B.S., Va. Mil. Inst.; Ph.D., Mass. Inst. of Tech.
- Gibson, James Edwin*, Adj. Prof. of Entom. B.A., Drake Univ.; M.S., Ph.D., Univ. of Iowa.
- Giesbrecht, Francis Gerhard*, Prof. of Stat. B.S.A., Univ. of Manitoba; M.Sc., Ph.D., Iowa State Univ.
- Gilbert, John Henderson*, Assoc. Prof. & Asst. Head, Pol. Sci. & Pub. Adm. A.B., Lambuth Coll.; M.A., Vanderbilt Univ.; Ph.D., Univ. of Va.
- Gilbert, Michael A.*, Asst. Dir. of Res. Life. B.A., Univ. of Vt.; M.A., Mich. State Univ.
- Gilbert, Richard Dean*, Prof. of Text. Chem. & Wood & Paper Sci. B.S., M.S., Univ. of Manitoba; Ph.D., Univ. of Notre Dame.
- Giles, Cheryl G.*, Res. Asst./Teach. Tech. in Microbiol. B.S., Campbell Univ.
- Gilliam, James Wendell*, Prof. of Soil Sci. B.S., Okla. State Univ.; M.S., Ph.D., Miss. State Univ.
- Gilligan, John G.*, Assoc. Prof. of Nuc. Engr. B.S., Purdue Univ.; M.S., Ph.D., Univ. of Mich.
- Gilmartin, David Paul*, Asst. Prof. of Hist. B.A., Univ. of Mich.; M.A., Ph.D., Univ. of Calif. at Berkeley.
- Gilmore, Robert C.*, Assoc. Prof. of Wood & Paper Sci. B.S., Penn. State Univ.; M. W. Tech., N.C. State Univ.
- Gilroy, Beverly Ann*, Assoc. Prof. of Anat., Physiol. Sci. & Radiol. B.S., D.V.M., Mich. State Univ.; M.A., Chapman Coll.
- Ginn, Jennifer Moreland*, Lect. in Engl. B.A., Wake Forest Univ.; M.A., Univ. of Tenn.
- Glass, Joseph Conrad, Jr.*, Prof. of Adult & Comm. Coll. Ed. B.D., Duke Divinity School; B.S., M.S., Ed.D., N.C. State Univ.
- Glenn, Susan A.*, Asst. Prof. of Hist. B.A., San Diego State Univ.; M.A., Univ. of Calif. at San Diego; Ph.D., Univ. of Calif. at Berkeley.
- Glisson, Tildon H.*, Prof. of Elect. & Comp. Engr. B.S., M.S., Univ. of Fla.; Ph.D., S. Methodist Univ.
- Glomb, Walter L.*, Adj. Prof. of Elect. & Comp. Engr. B.S., M.S., Columbia Univ.
- Glover, John Womble*, Ext. Prof. of Biol. & Agri. Engr. B.S., N.C. State Univ.
- Gnoffo, Peter A.*, Adj. Asst. Prof. of Mech. & Aero. Engr. B.S., Polytech. Inst. (Brooklyn); M.S., George Washington Univ.; Ph.D., Princeton Univ.
- Gold, Harvey Joseph*, Prof. of Stat. & Biomath. B.S., Univ. of Miami; M.S., Ph.D., Univ. of Wis.
- Goldberg, Robert L.*, Asst. Prof. of Phys. Ed. & Aquatics Dir. B.S., Springfield Coll.; M.S., Penn. State Univ.
- Goldstein, Irving S.*, Prof. of Wood & Paper Sci. B.S., Rensselaer Polytech. Inst.; M.S., Ill. Inst. of Tech.; Ph.D., Harvard Univ.
- Goldy, Ronald Gerard*, Asst. Prof. of Hort. Sci. B.S., East. Mich. Univ.; M.S., Mich. State Univ.; Ph.D., Univ. of Fla.
- Gonzalez, Gabriel*, Assoc. Prof. of For. Lang. & Lit. Bach., Centro Superior Est. (Leon); Licenciado, Univ. of Salamanca (Spain); Ph.D., Univ. of Munich (Germany).
- Goode, Larry Richard*, Adj. Asst. Prof. of Civ. Engr. B.S., Va. Polytech. Inst. & State Univ.; M.S., Ph.D., N.C. State Univ.
- Goode, Lucy C.*, Ext. Asst. Prof. of 4-H & Youth Devel. B.S., M.S., N.C. State Univ.; Re.D., Indiana Univ.
- Gooding, Guy Vernon, Jr.*, Prof. of Plant Path. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of Calif. at Davis.
- Goodman, Major M.*, Prof. of Crop Sci., Stat., Bot. & Gen. B.S., Iowa State Univ.; M.S., Ph.D., N.C. State Univ.
- Goodnight, James Howard*, Adj. Assoc. Prof. of Stat. B.S., M.E.S., Ph.D., N.C. State Univ.
- Goodwin, Thomas G.*, Lect. in Econ. & Bus. B.A., Univ. of Calif. at San Diego; M.A.T., Univ. of Chicago.
- Gosper, Joan Mary*, News Editor in Agri. Comm. B.S., New York State Univ. at Brockport; M.S., New York State Univ. at Geneseo.
- Gould, Christopher R.*, Prof. of Phys. B.Sc., Imperial Coll. (London); M.Sc., Ph.D., Univ. of Penn.
- Gould, Fred*, Assoc. Prof. of Entom. B.A., Queens Coll.; Ph.D., State Univ. of N.Y. at Stony Brook.
- Gracie, Larry Wayne*, Inst. Res. Officer for Spec. Projects. B.A., Northwestern State Univ.; M.S., E. Tex. State Univ.; Ph.D., Fla. State Univ.
- Grady, Perry Linwood*, Assoc. Dean Sch. of Text. & Prof. of Text. Engr. & Sci. B.S., M.S., Ph.D., N.C. State Univ.
- Graham, David M.*, Lect. in Engl. B.A., Dartmouth; M.F.A., Univ. of Mass. at Amherst.
- Grainger, John Joseph*, Prof. of Elect. & Comp. Engr. B.E.E., Univ. Coll. (Dublin); M.S., Ph.D., Univ. of Wis. at Madison.
- Grand, Larry Frank*, Prof. of Plant Path. & For. B.S., M.S., Penn. State Univ.; Ph.D., Wash. State Univ.
- Graunman, Laura C.*, Lect. in Engl. B.A., W. Mich. Univ.; M.F.A., Univ. of Ore. at Eugene.
- Gransee, Margaret M.*, Assoc. Coord. Acad. Adv. Prog. B.S., Lock Haven State Coll.; M.Ed., Univ. of N.C. at Chapel Hill; Ed.D., N.C. State Univ.
- Grant, William Cullen*, Prof. of Zool. & Coord. of Spec. Prog., School of Agr. & Life Sci. B.S., Livingstone Coll.; M.S., Ph.D., N.C. State Univ.
- Gratzl, Josef Stefan*, Elis & Signe Olsson Prof. of Pulp & Paper Sci. & Tech. Dip.Chem., Ph.D., Univ. of Vienna (Austria).
- Graves, Cranor F.*, Marriage Counselor, Div. of Stud. Aff. B.A., S.T.B., St. Mary's Sem. & Univ.; M.S., N.C. State Univ.
- Gray, Denis Owen*, Asst. Prof. of Psych. B.A., Manhattan Coll.; Ph.D., Mich. State Univ.
- Gray, William Michael*, News Ed. (T.V.) in Agri. Comm. B.A., High Point Coll.
- Greaves, Rose Louise*, Adj. Prof. of Hist. B.A., M.A., Ph.D., Univ. of Kan.; Ph.D., Univ. of London.
- Green, David P.*, Ext. Spec. in Food Sci. B.S., Davidson Coll.; M.S., E. Carolina Univ.
- Green, James T.*, Asst. Football Coach. A.B., N.C. State Univ.
- Green, James Terrell, Jr.*, Prof. of Crop Sci. B.S., Tenn. Tech. Univ.; M.S., Ph.D., Va. Polytech. Inst. & State Univ.
- Green, John W.*, Asst. to the Dean, Sch. of Vet. Med.

- Green, Judith A.*, International Stud. Advisor. B.A., Univ. of Mass.; M.Ed., Framingham State Coll.
- Greenwood, Michael S.*, Adj. Asst. Prof. of For. B.A., Brown Univ.; M.F., M.S., Ph.D., Yale Univ.
- Greeson, James C.*, Adj. Lect. in Elect. & Comp. Engr. B.S.E.E., St. Louis Univ.; M.S.E.E., Syracuse Univ.; M.S.O.R., Union Coll.
- Gregory, Anne Young*, Lect. in Engl. B.A., M.A., N.C. State Univ.
- Gregory, James Douglas*, Assoc. Prof. of For. B.S., M.S., Ph.D., N.C. State Univ.
- Gregory, John Hayes*, Sr. Ext. Area Livestock Spec. in Ani. Sci. B.S., M.S., N.C. State Univ.
- Gregory, Max Edwin*, Ext. Prof. of Food Sci. B.S., Univ. of Tenn.; M.S., Ph.D., N.C. State Univ.
- Gregory, Robert B.*, Head, Visual Comm. Sect., Agri. Comm. B.S., Lebanon Valley Coll.; M.A., Univ. of Md.
- Grennes, Thomas James*, Assoc. Prof. of Econ. & Bus. B.A., Indiana Univ.; M.A., Univ. of Wis.
- Griffin, Harold Carter*, Asst. Prof. of Curr. & Instr. B.A., Wake Forest Univ.; M.A., Univ. of Iowa; Ph.D., Univ. of Texas at Austin.
- Griffin, Harriette Owen*, Lect. in Econ. & Bus. B.A., M.E., N.C. State Univ.
- Griffin, Joan S.*, Acad. Coord. for Minority Stud., Sch. of Human. & S/S., & Lect. in Engl. B.A., Calif. Lutheran Coll.; M.A., La. State Univ.
- Griffis, Dieter P.*, Res. Assoc. in Engr. Res. Serv. B.S., Oswego St. Univ.; Ph.D., Univ. of N.C., Chapel Hill.
- Griffith, Wayland Coleman*, R. J. Reynolds Industries Prof. of Mech. & Aero. Engr. & Dir. of Engr. Design Cntr. A.B., M.S., Ph.D., Harvard Univ.
- Grimwood, James Michael*, Assoc. Prof. of Engl. B.A., Duke Univ.; M.A., Ph.D., Princeton Univ.
- Grindem, Carol Beth*, Asst. Prof. of Microbiol., Path., & Parasit. D.V.M., Iowa St. Univ.; Ph.D., Univ. of Minn.
- Grissom, Raymond Earl, Jr.*, Res. Assoc. in Entom. B.S., M.S., Ph.D., N.C. State Univ.
- Groff, Judy McLean*, Ext. Asst. Prof. of 4-H & Youth Dev. B.S., Univ. of N.C. at Greensboro; M.Ed., Ed.D., N.C. State Univ.
- Gross, Harry Douglass*, Prof. of Crop Sci. B.S., M.S., Rutgers Univ.; Ph.D., Iowa State Univ.
- Gross, Larry Martin*, Head Soccer & Lacrosse Coach. B.S., Towson State Univ.; M.S., Morgan State Univ.
- Grossfeld, Robert Michael*, Asst. Prof. of Zool. B.S., Univ. of Wis.; Ph.D., Stanford Univ. Med. School.
- Grosshandler, Stanley L.*, Adj. Assoc. Prof. of Anat., Physiol. Sci. & Radiol. B.A. College of Wooster; M.D., Ohio State Univ.
- Grubb, Barbara W.*, Asst. Curator of Art. B.A., Oberlin Coll.; M.A., Case Western Reserve Univ.
- Guess, Frank Mitchell*, Asst. Prof. of Stat. B.S., Wheaton Coll.; M.A., Univ. of Ky.; M.S., Ph.D., Fla. State Univ.
- Guirguis, Georges Halim*, Asst. Prof. of Math. B.Sc., Alexandria Univ.; B.Sc., Ein-Shams Univ.; Ph.D., Univ. of Tenn.
- Gull, Gaynell C.*, Lect. in Occ. Ed. B.S., M.Ed., N.C. State Univ.
- Gunsett, Fields C.*, Adj. Assoc. Prof. of Ani. Sci. B.S., Univ. of Calif. at Davis; M.S., Univ. of Idaho; Ph.D., Univ. of Wis. at Madison.
- Gunzenhauser, George W.*, Teach. Tech. in Chem. B.A., B.S., St. Andrews Pres. Coll.; M.Ed., Campbell Univ.
- Gupta, Ajaya K.*, Prof. of Civ. Engr. B.E., M.E., Univ. of Roorkee; Ph.D., Univ. of Ill.
- Gupta, Bhupender Singh*, Prof. of Text. Engr. & Sci. & Asst. Dept. Head B.Sc., Tech. Inst. of Text. (India); Ph.D., Manchester Coll. of Sci. & Tech. (England).
- Gurley, Edward Dewitt*, Assoc. Prof. of Civ. Engr. B.M.E., M.S., N.C. State Univ.; Ph.D., Univ. of Ill.
- Guthrie, David Scott*, Asst. Prof. of Crop Sci. B.S., Univ. of Calif. at Davis; M.S., Calif. State Univ. at Chico; Ph.D., Univ. of Ark.
- Guthrie, Frank Edwin*, Prof. of Entom. B.S., Univ. of Ky.; M.S., Ph.D., Univ. of Ill.
- Guthrie, Randall Wood*, Ext. Spec. in Ani. Sci. B.S., N.C. State Univ.
- Guy, James Stanley*, Asst. Prof. of Microbiol., Path. & Parasit. B.S., M.S., D.V.M., Univ. of Tenn. at Knox.
- Guzman, David Ricardo*, Res. Asst. in Entom. B.S., Univ. of Rhode Island; M.S., Univ. of Neb.
- Guzzo, Robert Joseph*, Wrestling Coach. B.S., E. Stroudsburg State Coll.
- Gwyn, Robert Grant*, Asst. Prof. of Phys. Ed. B.S., Campbell Coll.; M.A.T., Univ. of N.C. at Chapel Hill.
- Gwynn, George Richard*, Prof. (USDA) of Crop Sci. B.S., M.S., N.C. State Univ.; Ph.D., Iowa State Univ.
- Gyurcsik, Ronald S.*, Lect. in Elect. & Comp. Engr. B.S., Univ. of Mich.; M.S., Univ. of Calif. at Berkeley.
- Haase, David Glen*, Assoc. Prof. of Phys. A.B., Rice Univ.; A.M., Ph.D., Duke Univ.
- Hafley, William Leroy*, Prof. of For. & Stat. B.S., Penn. State Univ.; M.F., Ph.D., N.C. State Univ.
- Hagler, Winston Murry*, Assoc. Prof. of Poul Sci. B.S., M.S., Auburn Univ.; Ph.D., Univ. of Minn.
- Hain, Fred Paul*, Prof. of Entom. & For. B.S., Stetson Univ.; M.F., Duke Univ.; Ph.D., Mich. State Univ.
- Hair, Jay D.*, Adj. Prof. of Zool. & For. B.S., M.S., Clemson Univ.; Ph.D., Univ. of Alberta.
- Hairston, Ronald K.*, Counselor, Upward Bd. Prog. B.A., M.A., N.C. State Univ.
- Hale, Francis Joseph*, Prof. of Mech. & Aero. Engr. B.S., U.S. Mil. Acad.; S.M., Sc.D., Mass. Inst. of Tech.
- Hall, Anthony D.*, Adj. Asst. Prof. of Psych. B.A., Univ. of N.C. at Asheville; M.S., Ph.D., N.C. State Univ.
- Hall, Carol K.*, Assoc. Prof. of Chem. Engr. B.A., Cornell Univ.; M.A., Ph.D., State Univ. of N.Y. at Stonybrook.
- Hall, Endia B.*, Coord. Afro-Amer. Stud. Aff. B.A., Coll. of William and Mary.
- Hall, George Lincoln*, Prof. of Phys. B.S., Coll. of William & Mary; M.S., Syracuse Univ.; Ph.D., Univ. of Va.
- Hall, Robert M.*, Adj. Assoc. Prof. of Mech. & Aero. Engr. B.S., M.S., Ph.D., Univ. of Calif. at Berkeley.
- Halperen, Max*, Prof. of Engl. B.S., City Coll. of N.Y.; M.A., Ph.D., Fla. State Univ.
- Halstead, Samuel Christopher*, Lect. in Phys. Ed. A.B., Glenville State Coll.; M.S., West Va. Univ.
- Hamann, Donald Dale*, Prof. of Food Sci. & Biol. & Agri. Engr. B.S., M.S., S. Dakota State Univ.; Ph.D., Va. Polytech. Inst. & State Univ.
- Hamann, Hans Kermit*, Assoc. Statistician B.S., Colo. State Univ.; M.S., Kan. State Univ.
- Hambourger, Lynda H.*, Coord. of Eve. Prog. & Asst. to Dean, Sch. of Human. & Social Sci. A.B., Barnard Coll.; M.A., Univ. of Wis.
- Hambourger, Robert Michael*, Assoc. Prof. of Phil. A.B., Univ. of Chicago; Ph.D., Rockefeller Univ.
- Hamby, Dame Scott*, Dean, Sch. of Text. & Burlington Industries Prof. of Text. Tech. B.S., Ala. Polytech. Inst.
- Hamilton, Pat Brooks*, Prof. of Poul. Sci. & Microbiol. B.S., Northeastern State Coll.; Ph.D., Univ. of Wis.
- Hamilton, Richard Bache*, Adj. Instr. in Zool. B.S., M.S., N.C. State Univ.
- Hamilton, Rickey Allen*, Ext. For. Res. Spec. & Coord., Priv. Woodland Prog. B.A., Lycoming Coll.; M.F., Duke Univ.
- Hamilton, Vance E.*, Prof. of Soc. & Anth. & Asst. Dir. CRD. B.S., M.S., Ed.D., N.C. State Univ.
- Hammer, Douglas Ira*, Adj. Assoc. Prof. of Comp. Ani. & Special Sp. Med. B.S., M.D., Tufts Univ.; M.P.H., D.P.H., Harvard Univ.

- Hammerberg, Bruce*, Assoc. Prof. of Microbiol., Path. & Parasit. B.S., M.S., Ph.D., D.V.M., Mich. State Univ.
- Hammett, Wilma Gay Scott*, Ext. Asst. Prof. of Home Ec., N.C. Agri. Ext. Serv. B.S., M.S., Ph.D., Univ. of N.C. at Greensboro.
- Hammond, Frank Milton*, Asst. Dir. of Music. B.S., E.C.U.; M.S., Univ. of Ill.; Ed.D., Univ. of N.C. at Greensboro.
- Hammond, Thomas Napolis*, Assoc. Prof. of For. Lang. & Lit. B.A., M.A., N.C. Central Univ.; Ph.D., State Univ. of N. Y. at Buffalo.
- Hammonds, Randy L.*, Adj. Lect. in Phys. Ed. B.S., Pembroke State Univ.
- Hamouda, Hechmi*, Asst. Prof. of Text. Engr. & Sci. B.S., M.S., Nat'l Sch. of Engineers (Tunisia); Ph.D., State Univ. of N.Y. at Buffalo.
- Hanek, Kenneth William*, Prof. & Head of Chem. B.S., Ill. State Univ.; M.S., Ph.D., Univ. of Ill.
- Hand, Michael S.*, Adj. Assoc. Prof. of Anat., Physiol. Sci. & Radiol. D.V.M., Ph.D., Colo. State Univ.
- Haney, Carol Ann*, Lab. Supervisor, Gas Chromatograph, Mass Spectrometer. B.A., Duke Univ.
- Haning, Blanche Cournoyer*, Assoc. Prof. of Plant Path. & Entom. B.S., Univ. of Mass.; M.S., Ph.D., Iowa State Univ.
- Hankins, Gail A.*, Asst. Prof. of Speech-Comm. B.A., M.S., Fla. State Univ.; Ph.D., Univ. of Fla.
- Hankins, Orlando E.*, Asst. Prof. of Nuc. Engr. B.S., Ph.D., N.C. State Univ.
- Hanover, Stephen John*, Ext. Assoc. Prof. of Wood & Paper Sci. & Ext. For. Res. Spec. B.S., Univ. of Ill.; M.F., Yale Univ.
- Hansen, Arthur Paul*, Assoc. Prof. of Food Sci. B.S.A., M.S., Univ. of Ga.; Ph.D., Penn. State Univ.
- Hansen, Donald Joseph*, Asst. Prof. of Math. B.S., M.S., S. Methodist Univ.; Ph.D., Univ. of Tex.
- Hanson, Warren Durward*, Prof. of Gen. B.S., Univ. of Minn.; M.S., Ph.D., Purdue Univ.
- Hardie, Elizabeth M.*, Asst. Prof. of Com. Ani. & Special Spec. Med. B.A., Smith Coll.; D.V.M., Cornell Univ.
- Hardin, James Walker*, Prof. of Bot. B.S., Fla. Southern Coll.; M.S., Univ. of Tenn.; Ph.D., Univ. of Mich.
- Hardison, Marianna D.*, Lect. in Engl. B.A., St. Andrews Presby. Coll.; M.A., Georgetown Univ.
- Hardisty, Jerry Fredrick*, Adj. Assoc. Prof. of Microbiol., Path. & Parasit. D.V.M., Iowa State Univ.
- Hare, Thomas Michael*, Res. Assoc. in Mat. Sci. & Engr. B.S., Ph.D., Rutgers Univ.
- Hargrave, Harry Allen*, Assoc. Prof. of Engl. B.A., Vanderbilt Univ.; M.A., Geo. Peabody College for Teachers; Ph.D., Vanderbilt Univ.
- Harkins, Leon Herbert*, Ext. Assoc. Prof. of For. & Ext. For. Res. Spec. B.S., Univ. of Ga.; M.S., Colo. State Univ.
- Harling, David E.*, Adj. Asst. Prof. of Comp. Ani. & Equine Med. D.V.M., Cornell Univ.
- Harmon, Frank*, Assoc. Prof. of Arch. A.A., Arch. Assn. of London.
- Harper, Charles W., Jr.*, Assoc. Prof. of Curr. & Instr. B.S., M.A., E. Carolina Univ.; Ed.D., Univ. of N. Colo.
- Harrell, Daniel E.*, Dir., Engr. Ext. Ed. and Sr. Engr. Ext. Spec. B.E.E., B.S.I.M., Ga. Inst. of Tech.; M.Ec., N.C. State Univ.
- Harrington, Ben Davis*, Prof. of Food Ani. & Equine Med. B.S., N.C. State Univ.; D.V.M., Univ. of Ga.
- Harris, Cynthia J.*, Dir., Upward Bound Prog. B.A., Univ. of N.C. at Chapel Hill; M.Ed., Univ. of Va.
- Harris, Edwin Freeland*, Dir. of Campus Plan. & Construc. & Univ. Arch. B.Arch., N.C. State Univ.
- Harris, Ralton Joyner*, Environ. Health Physicist. B.S., M.S., N.C. State Univ.
- Harris, William Charles*, Prof. of Hist. B.A., M.A., Ph.D., Univ. of Ala.
- Harrison, Antony Howard*, Assoc. Prof. of Engl. A.B., Stanford Univ.; M.A., Ph.D., Univ. of Chicago.
- Hart, Clarence Arthur*, Prof. of Wood & Paper Sci. B.S., Va. Polytech. Inst.; M.S., Ph.D., N.C. State Univ.
- Hart, Franklin Delano*, Prof. of Mech. & Aero. Engr. & Vice Chanc. for Univ. Res. B.S.M.E., M.S.M.E., Ph.D., N.C. State Univ.
- Hartman, Kerrick Milton*, Res. Asst. in Plant Path. B.S., M.S., Univ. of Arizona.
- Hartwig, Robert Eduard*, Prof. of Math. B.S., Ph.D., Univ. of Adelaide (Australia).
- Harvey, Raymond W.*, Prof. of Ani. Sci. B.S., M.S., W. Va. Univ.; Ph.D., N.C. State Univ.
- Harvey, William B.*, Assoc. Prof. of Ed. Ldrshp. & Prog. Eval. & Act. Dept. Head B.A., West Chester State Coll.; Ed.M., Ed.D., Rutgers Univ.
- Haskin, Wayne Earle*, Asst. Prof. of Engl. B.A., N. Tex. State Univ.; M.A., La. State Univ.
- Hassan, Awatif El-Domiaty*, Prof. of For., Wood & Paper Sci., Biol. & Agri. Engr. B.S., Univ. of Alexandria (Egypt); M.S., Ph.D., Univ. of Calif. at Davis.
- Hassan, Hassan Ahmed*, Prof. of Mech. & Aero. Engr. B.S., Univ. of London; M.S., Ph.D., Univ. of Ill.
- Hassan, Hosni Moustafa*, Prof. of Food Sci. & Microbiol. B.S., Ain Shams Univ. (Egypt); Ph.D., Univ. of Calif. at Davis.
- Hassler, Francis Jefferson*, William Neal Reynolds Prof. & Head of Biol. & Agri. Engr. B.S., Univ. of Mo.; M.S., Ph.D., Mich. State Coll.
- Hastings, Felton L.*, Adj. Prof. of Entom. B.S., M.S., Auburn Univ.; Ph.D., N.C. State Univ.
- Hatch, Joyce*, Lect. & Asst. Dept. Head, Comp. Sci. B.S., M.Ed., N.C. State Univ.
- Hatchett, Stephen A.*, Asst. Prof. of Econ. & Bus. B.S., Univ. of Calif. at Berkeley; M.A., Univ. of Calif. at Riverside; Ph.D., Univ. of Calif. at Davis.
- Hauser, Edwin Wilbur*, Adj. Assoc. Prof. of Civ. Engr. & Chem. Engr., M.R.P., Univ. of N.C. at Chapel Hill; B.S., M.S., Ph.D., N.C. State Univ.
- Hauser, John Reid*, Prof. of Elect. & Comp. Engr. & Dir. of Solid State Lab. B.S., N.C. State Univ.; M.S., Ph.D., Duke Univ.
- Havner, Kerry Shuford*, Prof. of Civ. Engr. & Mat. & Sci. Engr. B.S., M.S., Ph.D., Okla. State Univ.
- Hawkins, Gerald Gordon*, Assoc. Vice Chancellor for Stud. Aff. B.S., N.C. State Univ.; M.S., Indiana Univ.; Ed.D., Duke Univ.
- Hawkins, Leo Franklin*, Ext. Spec. & Ext. Prof. of Human Devel., Ag. Ext. Serv. B.A., Wake Forest Coll.; M.Div., Yale Divinity School; Ed.D., N.C. State Univ.
- Hayes, Theresa Edwards*, Counselor. B.S., M.S., Ph.D., N.C. State Univ.
- Haygood, Hillis E.*, Instr. of Aero. St. B.S., N.C. A & T Univ.; M.A., Webster Coll.
- Haynes, Frank Lloyd, Jr.*, Prof. of Hort. Sci. & Gen. B.S.A., Ala. Polytech. Inst.; Ph.D., Cornell Univ.
- Haynie, William J., III*, Asst. Prof. of Occ. Ed. B.S., Old Dominion Univ.; M.Ed., Clemson Univ.; Ph.D., Penn State Univ.
- Haywood, Charles A.*, Assoc. Vice Chancellor, Stud. Aff. B.S., St. Augustine's Coll.; M.A.T., Ed.D., Univ. of N.C. at Chapel Hill.
- Hazel, Dennis W.*, Res. Asst. in For. B.S., M.S., N.C. State Univ.
- Hazel, Robert Boyd*, Ext. Prof. of For. B.S., M.S., Penn. State Univ.
- Headen, Alvin E.*, Asst. Prof. of Econ. & Bus. B.S.E., B.S., N.C. State Univ.; Ph.D., Mass. Inst. of Tech.
- Heagle, Allen Streeter*, Prof. (USDA) of Plant Path. B.S., Hamline Univ.; M.Ed., St. Cloud State Univ.; Ph.D., Univ. of Minn.
- Heath, Ralph C.*, Adj. Prof. of Civil Engr. B.S., Univ. of N.C. at Chapel Hill.
- Heck, Walter Webb*, Prof. (USDA) of Bot. B.S.Ed., Ohio State Univ.; M.S., Univ. of Tenn.; Ph.D., Univ. of Ill.

- Hedges, Barbara Sue*, Lib. & Ref. Lib. B.S., Harvey Mudd Coll.; M.A., Ind. Univ.; M.L.S., Univ. of Texas.
- Heimbach, Clinton Louis*, Prof. of Civ. Engr. & Assoc. Head Civ. Engr. M.S.C.E., Purdue Univ.; B.S.E., Ph.D., Univ. of Mich.
- Henderson, Warren Robert*, Assoc. Prof. of Hort. Sci. B.S., Univ. of N.H.; M.A., Harvard Univ.; Ph.D., Ohio State Univ.
- Hendrix, James E.*, Adj. Prof. of Text. Chem. B.S., Auburn Univ.; M.S., Ph.D., Clemson Univ.
- Hennessee, Glenn Lox Alpine*, Comp. Lab. Supv. in Chemistry. B.S., M.S., N.C. State Univ.
- Henrikson, Charles Kermit*, Asst. Prof. of Anat., Physiol. Sci. & Radiol. B.A., Saint Olaf Coll.; M.S., Ph.D., Purdue Univ.
- Henry, Crawford Irwin*, Head Tennis Coach. B.A., Tulane Univ.
- Henry, Edward T.*, Asst. Prof. of Food Ani. & Equine Med. B.S., Long Beach St. Coll.; D.V.M., Univ. of Calif. at Davis.
- Henry, Leslie T.*, Res. Assoc. in Soil Sci. B.A., Univ. of N.C. at Chapel Hill; M.S., Ph.D., Duke Univ.
- Hentz, Forrest Clyde, Jr.*, Prof. of Chem. B.S., Newberry Coll.; M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Hepler, Cedric Lambeth*, Lib. & Ref. Lib. B.A., Stetson Univ.; B.D., Th.M., Southeastern Baptist Sem.; M.S.L.S., Univ. of N.C. at Chapel Hill.
- Hepler, Robert T.*, Asst. Dir., Admissions. B.A., N.C. State Univ.
- Herakovich, Douglas E.*, Asst. Sports Info. Dir. B.A., Va. Polytech. Inst. & State Univ.
- Herman, Glenda Moore*, Ext. Prof. of Ext. Home Ec. & Spec. in Housing and House Furnishings. B.S., Univ. of N.C. at Greensboro; M.S., Univ. of Tn.; Ph.D., Univ. of N.C. at Greensboro.
- Herndl, Carl G.*, Asst. Prof. of Engl. B.A., Univ. of N.C. at Chapel Hill; Ph.D., Univ. of Minn.
- Herr, Sharon J.*, Stewart Theatre Prog. Dir. B.A., E. Carolina Univ.
- Hersh, Solomon Philip*, Charles A. Cannon Prof. of Text. & Head of Text. Engr. & Sci. B.S., N.C. State Univ.; M.S., Inst. of Text. Tech.; M.A., Ph.D., Princeton Univ.
- Hess, James D.*, Assoc. Prof. of Econ. & Bus. A.B., B.S., Princeton Univ.; Ph.D., Mass. Inst. of Tech.
- Hess, Thomas Michael*, Asst. Prof. of Psych. B.S., Penn. State Univ.; M.A., Ph.D., Southern Ill. Univ.
- Hester, Marvin Thomas*, Prof. of Engl. A.B., Centre Coll. of Ky.; M.A., Ph.D., Univ. of Fla.
- Hester, Mary Frances*, Assoc. Dir., McKimmon Ctr. Peace Coll.
- Hicks, William Odie, Jr.*, Asst. Strength Coach.
- Hiday, Virginia Aldige*, Prof. of Soc. & Anth. B.A., M.Ed., Ph.D., Univ. of N.C. at Chapel Hill.
- High, Walter Martin, III*, Lib. & Head Monographic Cat. A.B., Occidental Coll.; M.A., M.S.L.S., Univ. of N.C. at Chapel Hill.
- Hill, Charles Horace*, William Neal Reynolds Prof. of Poul. Sci. B.S., Colo. State Univ.; M.S., Ph.D., Cornell Univ.
- Hill, Dale R.*, Instr. in Mil. Sci. B.S., West Va. Univ.; M.P., Univ. of Va.
- Hill, Gary D.*, Asst. Prof. of Soc. & Anth. B.A., Fla. State Univ.; M.A., Ph.D., Univ. of Mass. at Amherst
- Hill, Wandra Patricia*, Coord. of Coop. Ed./Minority Student Aff., School of PAMS. B.A., M.A., N.C. Central Univ.
- Hilley, Harvey D.*, Assoc. Prof. of Food Ani. and Eq. Med. B.S., D.V.M., Texas A & M Univ.; Ph.D., Univ. of Minn.
- Hilliard, Garland K., Jr.*, Lect. in Occ. Ed. B.S., M.S., N.C. State Univ.
- Hillmann, Ruediger Carl*, Assoc. Prof. of Entom. B.S., Cornell Univ.; M.S., Mich. State Univ.; Ph.D., Penn. State Univ.
- Hinesley, Lewis Eric*, Assoc. Prof. of Hort. Sci. & For. B.S., M.S., N.C. State Univ.; Ph.D., Miss. State Univ.
- Hink, Howard Alan*, Asst. Athl. Dir. B.S., Alfred Univ.; M.B.A., Albany State Univ.
- Hinsaw, Jeffrey M.*, Asst. Prof. of Zool. B.S., Univ. of N.C. at Chapel Hill; M.S., Ph.D., N.C. State Univ.
- Hinton, Rosa M.*, Asst. Dir. of Fin. Aid. B.A., Bennett Coll.
- Hitchings, Robert Grant*, Reuben B. Robertson Prof. of Pulp & Paper Tech. B.S., N.Y. State College of For.; M.S., Duke Univ.
- Hoag, Dana L.*, Asst. Prof. of Econ. & Bus. B.S., M.S., Colo. State Univ.; Ph.D., Wash. State Univ.
- Hobbs, Joseph Patrick*, Prof. of Hist. B.A., Ga. Southern Coll.; M.A., Ph.D., Johns Hopkins Univ.
- Hobgood, Kenneth E.*, Adj. Asst. Prof. in Arch. B.A., Univ. of Ky.; M.A., Yale Univ.
- Hobgood, Thomas Newton, Jr.*, Prof. Soc. & Anth. & Dist. Ext. Dir. B.S., M.S., N.C. State Univ.; Ph.D., Fla. State Univ.
- Hodgson, Ernest*, William Neal Reynolds Prof. of Entom. B.S., Kings Coll. (England); Ph.D., Ore. State Univ.
- Hodgson, Thom Joel*, Prof. & Head of Ind. Engr. B.S.E., M.B.A., Ph.D., Univ. of Mich.
- Hodgson, Thomas Henry*, Prof. of Mech. & Aero. Engr. B.S., Loughborough Univ. of Tech.; B.S., Univ. of London; M.S., Cranfield Inst. of Tech. (England); Ph.D., Univ. of London.
- Hodson, Ronald G.*, Asst. Prof. of Zool. & Assoc. Dir., UNC Sea Grant College Prog. B.S., Manchester College; M.S., Univ. of Ark.; Ph.D., Tex. A & M Univ.
- Hoffman, Robert Lewis*, Assoc. Prof. of Univ. Stud. & Bot. B.S., N.C. State Univ.; M.A., Ph.D., Tulane Univ.
- Holler, William McFall*, Assoc. Prof. of For. Lang. & Lit. B.A., Wofford Coll.; M.A., Middlebury Coll.; Ph.D., Univ. of N.C. at Chapel Hill.
- Holley, Daniel Lester, Jr.*, Prof. of For. & Econ. & Bus. B.A., Wofford Coll.; B.S.F., M.F., Ph.D., N.C. State Univ.
- Holley, Linda Tarte*, Assoc. Prof. of Engl. A.B., Winthrop Coll.; M.A., Ph.D., Tulane Univ.
- Holley, Randall N.*, Res. Assoc. in Crop Sci. B.S., M.S., Ph.D., N.C. State Univ.
- Holjes, Hertman Christian*, Coord. of IMPC, Sch. of Ed. B.A., Duke Univ.; M.P.D., N.C. State Univ.
- Holloman, William T., III*, Sr. Coord., Undergrad. Stud. Ser. B.S., St. Augustine's Coll.; M.S., N.C. A&T State Univ.
- Holloway, Karla F.C.*, Assoc. Prof. of Engl. B.A., Talladega Coll.; M.A., Ph.D., Mich. State Univ.
- Holthausen, Duncan M., Jr.*, Prof. of Econ. & Bus. & Admin. of M.S. in Mgmt. Prog. B.A., Dartmouth Coll.; M.B.A., Columbia Univ.; Ph.D., Northwestern Univ.
- Holton, William C.*, Adj. Prof. of Elect. & Comp. Engr. B.S., Univ. of N.C. at Chapel Hill; M.S., Ph.D., Univ. of Ill.
- Holtzman, Abraham*, Prof. of Pol. Sci. & Pub. Adm. B.A., M.A., Univ. of Calif. at L.A.; M.A., Ph.D., Harvard Univ.
- Honeycutt, Keith L.*, Lect. in Engl. B.A., M.A., Univ. of N.C. at Chapel Hill.
- Honeycutt, Thomas L.*, Assoc. Prof. & Assoc. Dept. Head of Comp. Sci. B.S., M.S., Ph.D., N.C. State Univ.
- Hong, J. H. John*, Adj. Asst. Prof. of Elect. & Comp. Engr. B.S.E.E., Mont. State Univ., M.S.E.E., Syracuse Univ.; Ph.D., N.C. State Univ.
- Hooker, Willard Edwin*, Assoc. Prof. of Hort. Sci. B.L.A., Syracuse Univ.; M.L.A., N.C. State Univ.
- Hoomani, Hank Gholi*, Adj. Instr. in Mech. & Aero. Engr. B.S., M.S., N.C. State Univ.
- Hoover, Dale Max*, Prof. & Head of Econ. & Bus. B.S., M.S., Iowa State Coll.; M.A., Ph.D., Univ. of Chicago.

- Hoover, Michael Thomas, Asst. Prof. of Soil Sci. B.S., M.S., Ph.D., Penn. State Univ.
- Hopfenberg, Harold Bruce, Camille Dreyfus Prof. & Assoc. Dean for Plan. & Dev. B.S., M.S., Ph.D., Mass. Inst. of Tech.
- Hopfensperger, James A., Asst. Prof. of Design. B.A., Mich. State Univ.; M.A., Univ. of Ill. at Urbana; M.F.A., Univ. of Mich.
- Hoppe, Carol Leigh, Lect. in Engl. B.S., Univ. of Kan.; M.A., Univ. of Vt.
- Horan, Patricia Frances, Asst. Prof. of Psych. B.A., Univ. of Conn.; Ph.D., Univ. of Ariz.
- Horie, Yasuyuki, Prof. of Civ. & Mat. Engr. B.A., Internat'l Christian Univ. (Tokyo); M.S., Yale Univ.; Ph.D., Wash. State Univ.
- Horn, John William, Prof. of Civ. Engr. B.S.C.E., W. Va. Univ.; M.S.C.E., Mass. Inst. Tech.
- Horne, Grace S., Lect. in Engl. B.A., Univ. of N.C. at Chapel Hill; M.A., E. Carolina Univ.
- Horning, David J., Strength Coach. B.S., N.C. State Univ.
- Horton, Horace Robert, William Neal Reynolds Prof. of Biochem. & Food. Sci. B.S., Mo. School of Mines & Metallurgy; M.S., Ph.D., Univ. of Mo.
- Horvay, Gabriel, Adj. Prof. of Mech. & Aero. Engr. B.S., New York Univ.; E.E., Ph.D., Columbia Univ.
- Hoss, Donald Earl, Adj. Assoc. Prof. of Zool. B.S., Univ. of Mo.; M.S., Ph.D., N.C. State Univ.
- Houck, Byard, Jr., Lect. & Dir. of Engr. Spec. Prog. B.I.E., N.C. State Univ.; M.Div., Southeastern Baptist Theol. Sem.
- House, Garfield John, Asst. Prof. of Entom. B.S., Univ. of Calif. at Davis; M.S., Ph.D., Univ. of Ga.
- Houser, Gloria Kathleen, Lib. & Head of Serials Dept. A.B., Duke Univ.; B.S.L.S., Univ. of N.C. at Chapel Hill.
- Howard, Donald Robert, Assoc. Dean & Dir. of Acad. Aff. for Sch. of Vet. Med. & Prof. of Comp. Ani. & Special Spec. Med. B.S., D.V.M., Mich. State Univ.; M.S., Tex. A & M Univ.; Ph.D. Univ. of Mo. at Columbia.
- Howard, James L., Adj. Assoc. Prof. of Psych. A.B., Univ. of N.C. at Chapel Hill; M.S., Ph.D., Tulane Univ.
- Howard, Janet M., Minorities Recruiter, Univ. Ext. B.A., N.C. Central Univ.; M.Ed., Univ. of N.C. at Chapel Hill.
- Howard, Richard D., Dir. of Inst. Res. B.S., M.A., Ph.D., Va. Polytech. Inst. & State Univ.
- Howard, Thomas C., Adj. Lect. in Arch. B.N.E. N.C. State Univ.
- Howe, Ann Clark, Prof. & Head of Math & Sci. Ed. B.A., Univ. of Richmond; M.A., Univ. of N.C. at Chapel Hill; Ph.D., Univ. of Tex. at Austin.
- Howell, Bruce Inman, Adj. Asst. Prof. of Adult & Comm. Coll. Ed. B.S., M.A., E. Carolina Univ.; Ed.D., Duke Univ.
- Hoyt, Greg D., Asst. Prof. of Soil Sci. B.S., Kent State Univ.; M.S., Ohio State Univ.; Ph.D., Univ. of Ga.
- Hren, John Joseph, Prof. & Head of Mat. Sci. & Engr. B.S., Univ. of Wis. at Madison; M.S., Univ. of Ill. at Urbana. Ph.D., Stanford Univ.
- Hu, Wilma Wei-Lin, Res. Asst. in Crop Sci. B.S., Chung-Hsing Univ. (China); M.S., N.C. State Univ.
- Huang, Barney Kuo-Yen, Prof. of Biol. & Agri. Engr. & Univ. Studies. B.S., Nat'l Taiwan Univ.; M.S., Univ. of Ill.; Ph.D., Purdue Univ.
- Huang, Jeng-Sheng, Prof. of Plant Path. B.S., Nat'l Chung-Hsing Univ. (Taiwan); M.S., Ph.D., Univ. of Mo., Columbia.
- Huber, Steven Carl, Prof. (USDA) of Crop Sci. & Bot. B.S., Ph.D., Univ. of Wis. at Madison.
- Hudson, Lola C., Asst. Prof. of Anat., Physiol. Sci. & Radiol. B.S., D.V.M., Univ. of Tenn.; Ph.D., Cornell Univ.
- Hudson, Peyton Blanche, Assoc. Prof. of Text. Mgmt. & Tech. B.S.H.E., Univ. of Del.; M.S., Ph.D., Univ. of N.C. at Greensboro.
- Huffman, Rhonda W., Asst. Dir. of Adm. B.A., Winston-Salem State Univ.
- Huggard, John Parker, Lect. in Econ. & Bus. B.A., J.D., Univ. of N.C. at Chapel Hill.
- Hughes, Ronald Mark, Ext. Swine Test. Spec. in Ani. Sci. B.S., Penn. State Univ.
- Hugus, Z Zimmerman, Jr., Prof. of Chem. B.A., Williams Coll.; Ph.D., Univ. of Calif. at Berkeley.
- Huish, Melvin T., Prof. (USDI) of Zool. B.S., M.S., Univ. of Ill.; Ph.D., Univ. of Ga.
- Huisingh, Donald, Prof. of Univ. Stud. B.S., Univ. of Minn.; Ph.D., Univ. of Wis.
- Humenik, Frank James, Prof. of Biol. & Agri. Engr. & Assoc. Head in Charge of Ext. B.S.C.E., M.S., Ph.D., Ohio State Univ.
- Humphries, Ervin Grigg, Prof. of Biol. & Agri. Engr. & Mech. & Aero. Engr. B.S., M.S., Ph.D., N.C. State Univ.
- Hunt, Elaine, Asst. Prof. of Food Ani. and Equine Med. B.S., D.V.M., Univ. of Cal. at Davis.
- Hunt, Iris R., Area Dir., Res. Life. B.A., Trenton State Coll.; M.A., Hampton Inst.
- Hunt, James Baxter, Jr., Adj. Prof. of Econ. & Bus. B.S., M.S., N.C. State Univ.; J.D., Univ. of N.C. at Chapel Hill.
- Hunt, John Newton, Energy Ext. Coord., Biol. & Agri. Engr. B.S., N.C. State Univ.
- Hunt, Margaret Rogers, Lib. & Head Acquis. Dept. B.S., N.C. Central Univ.; M.S., Atlanta Univ.
- Huntsman, Gene Raymond, Adj. Prof. of Zool. B.S., Cornell Univ.; M.S., Ph.D., Iowa State Univ.
- Hurt, John Calvin, Adj. Assoc. Prof. of Mat. Sci. & Engr. B.S., Ph.D., Rutgers Univ.
- Hutchby, James Albert, Adj. Assoc. Prof. of Elect. Engr. B.E.E., Auburn Univ.; M.E.E., Ph.D., N.C. State Univ.
- Hutchison, Elvan Edward, Assoc. Prof. of Text. Mgmt. & Tech. & Acad. Coord., Sch. of Text. B.S., Marietta Coll.; M.S., Inst. of Text. Tech. (Va.)
- Hutchison, Paul T., Lect. in Elect. & Comp. Engr. B.S., Miss. State Coll.; M.S., Calif. Inst. of Tech.; Ph.D., Ga. Inst. of Tech.
- Huxster, William Thornhill, Jr., Ext. Prof. of For. & Ext. For. Res. Spec. B.S., M.W.T., N.C. State Univ.
- Hymen, David Neil, Prof. of Econ. & Bus. B.A., Brooklyn Coll.; M.A., Ph.D., Princeton Univ.
- Hymen, Theodore Martin, Asst. Prof. of Soc. & Anth. B.S., M.S., Ph.D., Univ. of Wis.
- Ihnen, Loren Albert, Prof. of Econ. B.S., M.S., Univ. of Ill.; Ph.D., Iowa State Univ.
- Iijima, Toshiro, Adj. Prof. of Text. Chem. B.S., Ph.D., Tokyo Inst. of Tech.
- Imbriani, Jack L., Adj. Asst. Prof. of Plant Path. B.S., Calif. State Polytech. Univ.; M.S., Ph.D., Univ. of Calif. at Riverside.
- Isehour, Joseph William, Jr., Asst. Prof. of Phys. Ed. B.S., M.A., Appalachian State Teachers Coll.
- Isley, S. Gerald, Lect. in Ind. Engr. B.A., Univ. of Ill.
- Israel, Daniel Wesley, Assoc. Prof. (USDA) of Soil Sci. B.S., M.S., Univ. of Ga.; Ph.D., Ore. State Univ.
- Jackson, David Michael, Assoc. Prof. (USDA) of Entom. B.S., Mich. State Univ.; M.S., Ph.D., Wash. State Univ.
- Jackson, Denis Sherald, Assoc. Dir., McKimmon Ctr. B.S., M.S., N.C. State Univ.
- Jackson, Walter Anderson, Asst. Prof. of Hist. A.B., Duke Univ.; A.M., Ph.D., Harvard Univ.
- Jackson, William Addison, William Neal Reynolds Prof. of Soil Sci. B.S., Cornell Univ.; M.S., Purdue Univ.; Ph.D., N.C. State Univ.
- Jacobson, Howard N., Dir., Inst. of Nutr. & Prof. Nutr. B.Sc., B.M., M.D., Northwestern Univ. Med. School.

- Jahn, Larry George, Ext. Asst. Prof. of Wood & Paper Sci. & Ext. For. Res. B.S., M.B.A., Penn. State Univ.
- James, Mark W., Instr. in Naval Sci. B.S., U.S. Naval Academy.
- Janney, Terri Lynn, Asst. Dir. of Thompson Theatre. B.F.A., Memphis State Univ.; M.F.A., Wayne State Univ.
- Janolino, Violeta G., Res. in Food Sci. B.S., M.S., Univ. of the Philippines; Ph.D., N.C. State Univ.
- Janowitz, Gerald Saul, Prof. of Mar., Earth & Atmos. Sci. B.S.A.E., Polytech. Inst. of Brooklyn; M.S.E., Ph.D., Johns Hopkins Univ.
- Jarrett, Ronald Eloyd, Assoc. Prof. of Crop Sci. B.S.A., Fla. A & M Univ.; M.S.A., Univ. of Fla.; Ph.D., N.C. State Univ.
- Jenkins, Alvin Wilkins, Jr., Prof. of Phys. B.E.E., M.S., N.C. State Univ.; Ph.D., Univ. of Va.
- Jenkins, David Morris, Prof. & Head of Agri. Comm. B.S., Campbell Coll.; M.A., Appalachian State Univ.; Ed.D., Univ. of S. Miss.
- Jennings, Harriet T., Ext. Asst. Prof. & Ext. Spec., Clothing and Textiles, Agri. Ext. Serv. B.S., Univ. of N.C. at Greensboro; M.S., Univ. of Tenn.; Ed.D., N.C. State Univ.
- Jervis, Laurens Gifford, Assoc. Prof. of For. B.S., M.F., N.C. State Univ.
- Jett, Jackson Bates, Jr., Assoc. Prof. of For. B.S., M.S., Univ. of Tenn.; Ph.D., N.C. State Univ.
- Jewell, Larry Ray, Assoc. Prof. of Occ. Ed. B.S., M.S., Va. Polytech. Inst. & State Univ.; Ph.D., Univ. of Mo., Columbia.
- Jezierski, Elisabeth Marie, Lect. in For. Lang. & Lit. A.B., Bryn Mawr Coll.; M.A., Harvard (Radcliffe).
- Jia, Lianda, Res. Scholar in Chem. Engr. M.S., Quinghua Univ.
- Jividen, Gay Melton, Adj. Asst. Prof. of Biol. & Agri. Engr. B.S., W. Va. Univ.; M.S., Ph.D., N.C. State Univ.
- Johnson, Bryan Hugh, Prof. of Ani. Sci. B.S., Southeastern La. Univ.; M.S., La. State Univ.; Ph.D., Okla. State Univ.
- Johnson, Charles Edward, Prof. of Phys. B.S., M.S., Ph.D., Yale Univ.
- Johnson, Cynthia E., Ext. Asst. Prof. & Ext. Human Dev. Spec., Agri. Ext. Serv. B.S., N.C. Central Univ.; M.S., E. Carolina Univ.; Ph.D., Ohio State Univ.
- Johnson, Gregory Lynn, Ext. Agri. Meteor. Spec. B.S., Ore. State Univ.; M.S., Univ. of Wis.
- Johnson, Martha R., Asst. Dir. of N.C. Agri. Ext. Serv. & Ext. Prof. of Home Ec. B.S., Georgia Coll.; M.S., Fla. State Univ.; Ed.D., N.C. State Univ.
- Johnson, Norman Elden, Adj. Prof. of For. B.S., M.S., Ore. State Univ.; Ph.D., Univ. of Calif.
- Johnson, Paul Reynolds, Prof. of Econ. A.B., Oberlin Coll.; M.S., N.C. State Univ.; Ph.D., Univ. of Chicago.
- Johnson, Richard R., Assoc. Prof. of Mech. & Aero. Engr. M.Sc., Univ. of Cape Town; Ph.D., Univ. of Fla.
- Johnson, Roy Houston, Jr., Asst. Prof. in Text. Engr. & Sci. M.S., Inst. of Text. Tech.; B.S., Ph.D., N.C. State Univ.
- Johnson, Susan A., Area Dir., Res. Life. B.A., Millersville Univ.; M.S., Shippensburg Univ.
- Johnson, Thomas, Prof. of Econ. & Stat. B.A., Univ. of Tex. at Austin; M.A., Tex. Christian Univ.; M.E.S., Ph.D., N.C. State Univ.
- Johnson, William Hugh, Prof. of Biol. & Agri. Engr. & Asst. Dir., N.C. Agri. Res. Serv. B.S., M.S., Ph.D., N.C. State Univ.
- Johnson, William L., Prof. of Ani. Sci. B.S., Univ. of New Hamp.; M.S., Ph.D., Cornell Univ.
- Johnston, David West, Prof. of Civ. Engr. B.S., M.S., Ph.D., N.C. State Univ.
- Johnston, Karen Lynn, Assoc. Prof. of Phys. B.A.T., M.S., Sam Houston State Univ.; Ph.D., Univ. of Texas at Austin.
- Johnston, Robert Edward, Assoc. Prof. of Microbiol. B.A., Rice Univ.; Ph.D., Univ. of Tex. at Austin.
- Jolley, Amie Lynn, Asst. Dir., Stu. Serv., Sch. of Text. B.S., N.C. State Univ.
- Jones, Audrey L., Asst. Dir., Res. Life. B.A., Montclair State Coll.; M.Ed., Trenton State Coll.
- Jones, Beverly A., Area Dir., Housing & Res. Life. B.A., M.S., Miami Univ.
- Jones, Brian W., Adj. Assoc. Prof. of Text. Chem. B.S., M.S., Univ. of Leeds.
- Jones, Charla L., Asst. Prof. of Comp. Ani. & Special Spec. Med. B.A., Univ. of Texas; D.V.M., M.S., Texas A&M Univ.
- Jones, Charles Parker, Prof. of Econ. & Bus. A.B., M.B.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Jones, Evan Earl, Prof. of Ani. Sci. & Biochem. B.S., Colo. State Univ.; M.S., Ph.D., Univ. of Ill.
- Jones, Frank Tisdale, Assoc. Prof. of Poul. Sci. B.S., Univ. of Fla.; M.S., Ph.D., Univ. of Ky.
- Jones, J. Richard, Adj. Assoc. Prof. of Elect. & Comp. Engr. B.S., Utah State Univ.; M.S., Ph.D., Cornell Univ.
- Jones, James Robert, Prof. of Ani. Sci. and Spec.-In-Charge, Ext. Swine Husb. B.S., M.S., Univ. of Ky.; Ph.D., Cornell Univ.
- Jones, L. Meyer, Adj. Prof. of Anat., Physiol. Sci., & Radiol. A.B., DePauw Univ.; M.S., D.V.M., Iowa St. Univ.; Ph.D., Univ. of Minn.
- Jones, Lawrence Keith, Prof. of Counselor Ed. B.A., Sacramento State Coll.; M.S.Ed., Univ. of Penn.; Ph.D., Univ. of Mo.
- Jones, Louis Altman, Prof. of Chem. B.A., M.A., Clark Univ.; Ph.D., Tex. A & M Univ.
- Jones, Robert R., Adj. Asst. Prof. of Math. & Sci. Ed. B.S., N.C. State Univ.; M.A.T., Univ. of N.C. at Chapel Hill; Ed.D., Duke Univ.
- Jones, Ronald Klair, Prof. of Plant Path. M.S., Univ. of Del.; B.S., Ph.D., Va. Polytech. Inst. & State Univ.
- Jones, Rosemary M., Asst. Dir., Cont. Ed. & Prof. Dev. B.A., Baylor Univ.; M.Ed., N.C. State Univ.
- Jones, Victor Alan, Prof. & Teach. Coord. of Food Sci. & Prof. of Biol. & Agri. Engr. B.S., M.S., Ph.D., Mich. State Univ.
- Jones, Walter Baskerville, Dir. of Career Plan. & Place. B.A., Coll. of William & Mary; M.Ed., N.C. State Univ.
- Joost, Michael G., Assoc. Prof. of Ind. Engr. B.S.E., Harvey Mudd Coll.; M.S.I.E., Ph.D., Purdue Univ.
- Jordan, William J., Prof. & Head of Speech-Comm. B.A., M.A., Univ. of Houston; Ph.D., Wayne State Univ.
- Jorgensen, Jacques Richard, Adj. Assoc. Prof. of For. B.S., Mich. Coll. of Min. & Tech.; M.S., Mich. State Univ.; Ph.D., Univ. of Minn.
- Joyce, Thomas Wayne, Prof. of Wood & Paper Sci. B.S., Rose-Halman Inst. of Tech.; M.S., Ph.D., Purdue Univ.
- Joyner, Charles Edward, Assoc. Prof. & Head of Design & Asst. Dean, Sch. of Design. B.S., N.C. A&T State Univ.; M.F.A., Univ. of N.C. at Greensboro.
- Kagan, Kenneth, Adj. Assoc. Prof. of Comp. Ani. & Special Spec. Med. V.M.D., Univ. of Penn.
- Kahn, Joseph Stephan, Prof. of Biochem. B.S., Univ. of Calif. at Berkeley; Ph.D., Univ. of Ill.
- Kalat, James W., Assoc. Prof. of Psych. A.B., Duke Univ.; M.A., Ph.D., Univ. of Penn.
- Kamprath, Eugene John, William Neal Reynolds Prof. of Soil Sci. B.Sc., M.Sc., Univ. of Neb.; Ph.D., N.C. State Univ.
- Kamykowski, Daniel, Prof. of Mar., Earth & Atmos. Sci. B.S., Loyola Univ.; Ph.D., Scripps Inst. of Oceanography, Univ. of Calif. at San Diego.

- Kamieh, Robert Emil*, Adj. Prof. of Microbiol. B.A., Univ. of Va.; M.D., Medical Coll. of Va.
- Kanipe, John Thomas, Jr.*, Vice Chan. for Devel. B.S., M.Ed., N.C. State Univ.
- Karlstrom, Karl E.*, Adj. Asst. Prof. of Marine, Earth, & Atmos. Sci. B.S., N. Ariz. Univ.; M.S., Ph.D., Univ. of Wyoming.
- Karp, Debra A.*, Asst. Dir. of Stewart Theatre. B.A., Univ. of N.C. at Chapel Hill.
- Karvazy, Eszter S.*, Staff Phys., Stud. Health Serv. M.D., Semmelweis Med. Sc., Budapest, Hungary.
- Kataoka, Hiroko*, Asst. Prof. of For. Lang. & Lit. B.A., Kobe Coll., (Japan); M.A., Ph.D., Univ. of Ill. at Urbana.
- Katz, Steven B.*, Instr. of Engl. B.A., Mich. St. Univ.; M.A., Univ. of Rhode Island.
- Katzin, Gerald Howard*, Prof. of Phys. B.S., M.S., Ph.D., N.C. State Univ.
- Kauffman, James F.*, Assoc. Prof. of Elect. & Comp. Engr. B.S., Univ. of Mo.; M.S., Univ. of Ill.; Ph.D., N.C. State Univ.
- Kavlock, Robert J.*, Adj. Asst. Prof. of Zool. B.S., Ph.D., Univ. of Miami.
- Kawanishi, Clinton Y.*, Adj. Assoc. Prof. of Entom. B.A., M.S., Univ. of Hawaii; Ph.D., Purdue Univ.
- Kays, Barrett L.*, Adj. Asst. Prof. of Land. Arch. B.S., Okla. State Univ.; M.Lar., N.C. State Univ.
- Kebschull, Harvey G.*, Assoc. Prof. of Pol. Sci. & Pub. Adm. & Asst. to Dean for Int'l. Studies, Sch. of Humanities & Soc. Sci. B.A., M.A., Univ. of Neb.; Ph.D., Univ. of Ill.
- Keener, Donald Spring*, Lib. & Asst. Dir. for Gen. Serv. B.S., Xavier Univ.; M.S.L.S., Western Reserve Univ.
- Keever, Dennis Whitener*, Asst. Prof. (USDA) of Entom. B.S., M.S., Ph.D., N.C. State Univ.
- Keller, Anna P.*, Dean of Admiss. B.S., Madison Coll.
- Kelley, Carl Timothy*, Assoc. Prof. of Math. B.A., Vanderbilt Univ.; Ph.D., Purdue Univ.
- Kellison, Robert Clay*, Prof. & Dir. of For. B.S.F., W. Va. Univ.; M.S., Ph.D., N.C. State Univ.
- Kelly, John Rivaard*, Prof. of For. Lang. & Lit. B.A., Mexico City Coll.; A.M., Ph.D., Univ. of S. Calif.
- Kelly, Myron William*, Prof. of Wood & Paper Sci. B.S., State Univ. of N.Y., Ph.D., N.C. State Univ.
- Keltie, Richard Francis*, Assoc. Prof. of Mech. & Aero. Engr., Dir., Ctr. for Sound & Vibration. B.S.M.E., M.S., Ph.D., N.C. State Univ.
- Kemp, Philip S., Jr.*, Reg. Mar. Adv. Spec., Sea Grant Prog. B.S., M.A., Auburn Univ.
- Kemp, Ronald E.*, Instr. Support Spec., Hum. & Soc. Sci.
- Kennedy, George Grady*, Prof. of Entom. B.S., Ore. State Univ.; Ph.D., Cornell Univ.
- Kennedy, Janice R.*, Adj. Asst. Prof. of Adult & Comm. Coll. Ed. B.S., Ala. State Univ.; M.A., Atlanta Univ.; Ph.D., Fla. State Univ.
- Kerby, Jerome Howard*, Assoc. Prof. (USDA) of Zool. B.S., M.S., Tex. Christian Univ.; Ph.D., Univ. of Va.
- Kessel, John Joseph*, Asst. Prof. of Engl. B.A., Univ. of Rochester; Ph.D., Univ. of Kansas.
- Kessler, Sanford H.*, Assoc. Prof. of Pol. Sci. & Pub. Adm. B.A., Brandeis Univ.; Ph.D., Boston Univ.
- Keys, Robert Dean*, Assoc. Prof. of Crop Sci. B.S., M.S., Univ. of Calif. at Riverside; Ph.D., Iowa St. Univ.
- Khorram, Siamak*, Prof. of For. & Elect. & Comp. Engr. and Acting Dir. of Comp. Graphics Ctr. M.Sc., Univ. of Tehran (Iran); M.Sc., Ph.D., Univ. of Calif. at Davis.
- Khosla, Narendra Prakash*, Assoc. Prof. of Civil Engr. B.S., Univ. of Jodhpur (India); M.S., Univ. of Roorkee, (India); Ph.D., Purdue Univ.
- Kidd, Richard Henry*, Lect. in Phys. Ed. B.S., Campbell Coll.; M.A., East Carolina Univ.
- Killion, Laura W.*, Lect. in Engl. B.A., M.A., Univ. of N.C. at Chapel Hill.
- Kilpatrick, Peter K.*, Asst. Prof. of Chem. Engr. B.A., Occidental Coll.; Ph.D., Univ. of Minn.
- Kimberly, Michael Murray*, Assoc. Prof. of Mar., Earth & Atmos. Sci. B.Sc., Univ. of W. Ontario; Ph.D., Princeton Univ.
- Kimbrell, Jack E.*, Sr. Engr. Ext. Spec. in Ind. Ext. Serv. B.S., M.A., E. Carolina Univ.
- Kimber, William C.*, Asst. Prof. of Hist. B.A., Rice Univ.; M.S., Ph.D., Cornell Univ.
- Kimrey, Elizabeth L.*, Couns., Stud. Aff. B.A., Agnes Scott Coll.; M.Ed., Ga. State Univ.; Ed.D., Duke Univ.
- King, Dannie Hilleary*, Adj. Assoc. Prof. of Microbiol. B.S., Davidson Coll.; M.S., W. Va. Univ.; Ph.D., N.C. State Univ.
- King, Doris Elizabeth*, Prof. of Hist. A.B., Ga. State Woman's Coll. at Valdosta; M.A., Ph.D., Duke Univ.
- King, John B.*, Res. Asst. in Chem. Engr. B.E.T., Univ. of N.C. at Charlotte
- King, L. Ellis*, Adj. Prof. in Civ. Engr. B.S., N.C. State Univ.; Ph.D., Univ. of Calif. at Berkeley.
- King, Larry Dean*, Assoc. Prof. of Soil Sci. B.M.E., Ga. Inst. of Tech.; M.S., Ph.D., Univ. of Ga.
- King, Margaret Fontaine*, Assoc. Prof. of Engl. A.B., M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- King, Richard Adams*, M.G. Mann Prof. of Econ. B.S., Univ. of Conn.; M.S., Univ. of Calif. at Berkeley; M.P.A., Ph.D., Harvard Univ.
- King, Russell Edward*, Lect. in Ind. Engr. B.S., M.S., Univ. of Fla.
- Kinlaw, Rachel K.*, Ext. Assoc. Prof. of Ext. Home Ec. B.S., E. Carolina Univ.; M.Ed., N.C. State Univ.
- Kirk, Thomas Kent*, Adj. Prof. of Wood & Paper Sci. B.S., La. Polytech. Inst.; M.S., Ph.D., N.C. State Univ.
- Kirkman, Adrianna Grant*, Instr. in Wood & Paper Sci. B.S., M.S., N.C. State Univ.
- Kirkpatrick, Gary J.*, Res. Asst. in Mar., Earth & Atmos. Sci. B.S.E.E., Univ. of Miami.
- Kirsch, Sondra L.*, Assoc. Prof. of Rec. Res. Adm. B.A., Univ. of Akron; M.S., Univ. of N.C. at Chapel Hill.
- Kiser, James Norman*, Asst. Football Coach. B.A., M.B.A., Furman Univ.
- Klaenhammer, Todd R.*, Assoc. Prof. of Food Sci. & Microbiol. B.S., M.S., Ph.D., Univ. of Minn.
- Klang, Eric Carl*, Asst. Prof. of Mech. & Aero. Engr. B.S., M.S., Univ. of Mo.; Ph.D., Va. Polytech. Inst. & State Univ.
- Klarman, William L.*, Prof. & Head of Plant Path. B.S., East Ill. Univ.; M.S., Ph.D., Univ. of Ill. at Urbana.
- Kleeman, Edwin G.*, Res. Asst. in Food Sci. B.S., Univ. of Ky.; M.S., Ore. State Univ.
- Kleeman, Karl T.*, Adj. Assoc. Prof. of Microbiol. B.S., Purdue Univ.; Ph.D., Oregon State Univ.
- Klein, Katherine W.*, Assoc. Prof. of Psych. B.A., Univ. of Mich.; M.A., Ph.D., Wayne State Univ.
- Kleinstreuer, Clement*, Assoc. Prof. of Mech. & Aero. Engr. B.S., Tech. Univ. of Munich; M.S., Stanford Univ.; Ph.D., Vanderbilt Univ.
- Kleiss, H. Joseph*, Assoc. Prof. & Teaching Coord., Soil Sci. B.S., M.S., Iowa State Univ.; Ph.D., Univ. of Ill. at Urbana.
- Klenin, Marjorie Anne*, Assoc. Prof. of Phys. B.A., Swarthmore Coll.; M.S., Ph.D., Univ. of Penn.
- Klett, David E.*, Adj. Prof. of Mech. and Aero. Engr. B.S., Mich. State Univ.; M.S., Ph.D., Univ. of Fla.
- Kloos, Wesley Edwin*, Prof. of Gen. & Microbiol. B.S., Rutgers Univ.; M.S., Ph.D., Iowa State Univ.
- Knecht, Thomas W.*, Inst. & Sect. Head, Pub. Agri. Comm. A.B., A.M., Univ. of Ill. at Urbana.
- Knight, Dolores G.*, Teach. & Res. Tech. in Chem. B.S., Univ. of S.C.
- Knoeber, Charles Robert*, Prof. of Econ. & Bus. B.A., Wash. State Univ.; Ph.D., Univ. of Calif. at L.A.
- Knopp, James Arthur*, Assoc. Prof. of Biochem. B.A., Carleton Coll.; Ph.D., Univ. of Ill.

- Knott, Fred Nelson*, Ext. Prof. of Ani. Sci. & Spec.-Inchge., Dairy Husb. B.S., M.S., N.C. State Univ.; Ph.D., Va. Polytech. Inst. & State Univ.
- Knowles, Albert Sidney, Jr.*, Prof. of Engl. B.A., M.A., Univ. of Va.
- Knowles, Charles Ernest*, Assoc. Prof. of Mar., Earth & Atmos. Sci. B.S., Univ. of Utah; M.S., Ph.D., Tex. A & M Univ.
- Koch, Carl Conrad*, Prof. of Mat. & Sci. Engr. B.S., M.S., Ph.D., Case Inst. of Tech.
- Koenigs, Jerome W.*, Adj. Prof. of Plant Path. B.S., Univ. of Minn.; M.S., Syracuse Univ.; Ph.D., Washington State Univ.
- Koger, Robert K.*, Adj. Asst. Prof. of Ind. Engr. B.S., Univ. of Tenn.; M. of Econ., Ph.D., N.C. State Univ.
- Koh, Kwangil*, Prof. of Math. B.S., M.S., Auburn Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- Kohl, Jerome*, Sr. Engr. Ext. Spec. & Lect. in Nuc. Engr. & Ind. Ext. Serv. B.S., Calif. Inst. of Tech.; M.S., N.C. State Univ.
- Kolb, John Ronald*, Prof. of Math. & Math. & Sci. Ed. A.B., Ph.D., Univ. of Md.
- Kolbas, Robert M.*, Assoc. Prof. of Elect. & Comp. Engr. B.S., Cornell Univ.; M.S., Ph.D., Univ. of Ill.
- Koningsberger, Diederik Christiaan*, Adj. Assoc. Prof. of Phy. B.S., M.S., Ph.D., Univ. of Technology (Eindhoven).
- Konster, Thomas Rhinehart*, Prof. of Hort. Sci. B.S., Univ. of Ky.; M.S., Ph.D., N.C. State Univ.
- Konyha, Kenneth D.*, Res. Asst. in Biol. & Agri. Engr. B.A., Kalamazoo Coll.; B.E., Univ. of Fla.
- Koon, James F., III*, Teach. Tech. in Civ. Engr. B.S., N.C. State Univ.
- Korhonen, Reino W.*, Res. Asst. in Food Sci. B.S., M.S., Univ. of Ga.
- Kornegay, Joe Neal*, Prof. of Comp. Ani. & Special Spec. Med. B.S., D.V.M., Texas A & M Univ.; M.S., Ph.D., Univ. of Ga.
- Koros, William John*, Adj. Prof. of Chem. Engr. B.S., M.S., Ph.D., Univ. of Texas at Austin.
- Korte, Charles Davis*, Prof. & Asst. Hd. of Univ. Stud. B.A., Miami Univ.; Ph.D., Harvard Univ.
- Kosinski, Judy Kidd*, Lect. in Engl. B.A., M.A., Va. Polytech. Inst. & State Univ.
- Kraar, Ebba Freund*, Lib. & Ref. Lib. B.A., Univ. of N.C. at Chapel Hill; M.L.S., School of Info. Stud., Syracuse Univ.
- Kramer, Jonathan C.*, Asst. Dir. of Music. B.S., New Coll. of Calif. at San Francisco.
- Kriz, George James*, Prof. of Biol. & Agri. Engr. & Assoc. Dir. of N.C. Agri. Res. Serv., Sch. of Agri. and Life Sci. B.S.A.E., M.S.A.E., Iowa State Univ.; Ph.D., Univ. of Calif. at Davis.
- Krochmal, Arnold*, Adj. Prof. of For. B.S., N.C. State Univ.; M.S., Ph.D., Cornell Univ.
- Kromer, Robert A.*, Adj. Asst. Prof. of Pol. Sci. & Pub. Adm. B.A., Univ. of Fla.; M.A., Ph.D., Duke Univ.
- Kromberg, Charles L.*, Adj. Asst. Prof. of Psych. B.A., Brooklyn College; Ph.D., Duke Univ.
- Kronrad, Gary Douglas*, Asst. Prof. of For. B.A., C.W. Post Coll.; M.S., Ph.D., Univ. of Mass.
- Kuczynski, Michael P.*, Lect. in Engl. B.A., St. Joseph's Univ.; M.A., Univ. of N.C. at Chapel Hill.
- Kuehn, Richard T.*, Lect. & Lab Supvr. in Elect. & Comp. Engr. B.S., Univ. of Del.
- Kuhara, Takatoshi*, Res. Assoc. in Microbiol., Path., & Parasit. B.A., Tokyo Univ. of Agri. & Tech.; M.S., Ph.D., Univ. of Tokyo.
- Kuhr, Ronald J.*, Prof. & Head of Entom. B.S., Univ. of Wis.; Ph.D., Univ. of Calif. at Berkeley.
- Kupiec, Paul H.*, Asst. Prof. of Econ. & Bus. B.A., George Washington Univ.; A.M., Ph.D., Univ. of Penn.
- Kwanzyen, Prachaub*, Asst. Prof. (USDA), of Crop Sci. B.S., Kasetsart Univ.; (Thailand); M.S., Wright State Univ.; Ph.D., Univ. of Calif. at L.A.
- Laarman, Jan G.*, Assoc. Prof. of For. B.S., Univ. of Mich.; M.S., M.A., Ph.D., Univ. of Calif. at Berkeley.
- Lackey, Carolyn Jean*, Ext. Assoc. Prof. of Ext. Home Econ. B.S.H.E., Univ. of N.C. at Greensboro; M.S., Ph.D., Univ. of Tenn.
- Lada, Thomas Joseph*, Assoc. Prof. of Math. A.B., Holy Cross Coll.; M.S., Ph.D., Univ. of Notre Dame.
- Lado, Fred, Jr.*, Prof. of Phys. B.S., Ph.D., Univ. of Fla.
- Ladrach, William E.*, Adj. Asst. Prof. of For. B.S., M.F., Univ. of Mich.
- Lambe, Philip C.*, Asst. Prof. of Civ. Engr. B.S., M.S., Ph.D., Mass. Inst. of Tech.
- Lamont, William James, Jr.*, Asst. Prof. of Hort. Sci. B.S., Lebanon Valley Coll.; B.S., Delaware Valley Coll.; M.S., Ph.D., Cornell Univ.
- Lamp, Carl David*, Res. Assoc. in Elect. & Comp. Engr. B.G.S., Ph.D., Univ. of Mo.
- Lampert, Emmett Philip*, Asst. Prof. of Entom. B.A., N. Dakota State Univ.; M.S., Ph.D., Mich. State Univ.
- Lancia, Richard A.*, Assoc. Prof. of For. & Zool. B.S., Univ. of Mich.; M.A., S. Ill. Univ.; Ph.D., Univ. of Mass.
- Lane, Bryce Holt*, Lect. in Hort. Sci. B.S., Univ. of Mass. at Amherst; M.S., Ohio State Univ.
- Lange, Marta A.*, Lib. Ref. Dept. Head. B.S., Central Mich. Univ.; M.A., Univ. de Salamanca (Spain); A.M.L.S., Univ. of Mich.
- Lange, Martha Scottford*, Asst. Prof. of Prod. Design. B.A., Oberlin Coll.; B.F.A., M.F.A., Yale Univ.
- Lanier, Albert Barnes*, Dir. of Univ. Rel. B.S., N.C. State Univ.; M.S., Cornell Univ.; Ed.D., N.C. State Univ.
- Lanier, Alicia L.*, Ext. Spec. in Biol. & Agri. Engr. B.S., N.C. State Univ.
- Lanier, Tyre Calvin*, Assoc. Prof. of Food Sci. B.S., Ph.D., Univ. of Ga.
- Lao, Hwei-Chen*, Teach. Tech. in Chem. B.S., Nat. Taiwan Univ.; M.S., Ohio State Univ.
- Lapp, John Summer*, Assoc. Prof. & Assoc. Head for Econ. & Bus. A.B., Wesleyan Univ.; Ph.D., Princeton Univ.
- Larick, Duane K.*, Asst. Prof. of Food Sci. B.S., M.S., Ohio State Univ.; Ph.D., Univ. of Mo.
- Larson, Roy Axel*, Prof. of Hort. Sci. B.S., M.S., Univ. of Minn.; Ph.D., Cornell Univ.
- Laryea, Doris Marie Lucas*, Assoc. Prof. of Engl. B.S., N.C. A&T State Univ.; M.A., N.C. Central Univ.; Ph.D., Univ. of Ill. at Urbana.
- Lasher, Dana Alfred*, Adj. Lect. in Comp. Sci. B.S.E.E., Mass. Inst. of Tech.
- Laskey, John Willson*, Adj. Asst. Prof. in Poul. Sci. B.S., M.S., Geo. Washington Univ.; Ph.D., N.C. State Univ.
- Lassiter, Charles A.*, Prof. & Head of Ani. Sci. B.S., M.S., Univ. of Ky.; Ph.D., Mich. State Univ.
- Lassiter, Louie Thomas*, Asst. Prof. of Text. Mgmt. & Tech. & Assoc. Dir. of Text. Ext. B.S., M.S., N.C. State Univ.
- Latch, Dana May*, Assoc. Prof. of Math. B.A., Harpur Coll.; M.A., Queens Coll.; Ph.D., City Univ. of N.Y.
- Lauffer, Richard A.*, Head & Prof. of Phys. Ed. A.B., Duke Univ., M.Ed., Univ. of N.C. at Chapel Hill; Ph.D., Univ. of Md.
- Laurie-Ahlberg, Cathy C.*, Prof. of Gen. B.S., Ph.D., Univ. of Minn.
- LaVopa, Anthony J.*, Assoc. Prof. of Hist. B.A., Boston Coll.; Ph.D., Cornell Univ.
- Lea, Russell*, Assoc. Prof. of For. & Soil Sci. & Dir., Hardwood Coop. B.S.F., Univ. of Wash.; Ph.D., State Univ. of N.Y.
- Leach, James Woodrow*, Assoc. Prof. of Mech. & Aero. Engr. B.S., Univ. of Tex. at Arlington; M.S., Ariz. State Univ.; Ph.D., Rice Univ.
- Leager, Kay Porter*, Asst. Dir. of Admissions. B.A., East Carolina Univ.; M.A., Appalachian State Univ.

- Leath, Steven*, Asst. Prof. (USDA) of Plant Path. B.S., Penn. State Univ.; M.S., Univ. of Del.; Ph.D., Univ. of Ill. at Urbana.
- Leath, Virginia Marie*, Asst. Prof. in Phys. Ed. B.S., Jacksonville State Univ.; M.Ed., Middle Tenn. State Univ.
- LeBourgeois, Joseph Charles*, Lib. & Cat. Lib. B.A., M.S., La. State Univ.
- Lece, James Giacomo*, William Neal Reynolds Prof. of Ani. Sci. & Microbiol. B.A., Dartmouth Coll.; M.S., Penn. State Univ.; Ph.D., Univ. of Penn.
- Lee, Joshua Alexander*, Prof. (USDA) of Crop Sci. A.B., San Diego State Coll.; Ph.D., Univ. of Calif. at Davis.
- Lee, Patricia Jones*, Asst. Dir. of Fin. Aid A.B., Greensboro Coll.; M.Ed., Univ. of N.C. at Greensboro.
- Lee, Scott H.R.*, Instr. in Aero. Studies. B.S.B.A., Univ. of Central Fla.; M.A., Webster Univ.; M.S., Univ. of S. Calif.
- Lee, Stan Sun-Hwa*, Adj. Assoc. Prof. of Elect. & Comp. Engr. B.S., Seoul Nat'l Univ.; M.S., Ph.D., Univ. of Calif. at L.A.
- Leffler, Charles D.*, Asst. Vice Chan. for Bus. B.S., Univ. of Cincinnati.
- Leidy, Ross Bennett*, Sr. Res. in Entom. B.S., M.S., Texas A & M Univ.; Ph.D., Auburn Univ.
- Leiter, Jeffrey Carl*, Assoc. Prof. of Soc. & Anth. B.A., Williams Coll.; Ph.D., Univ. of Mich.
- Leith, Terri Thornburg*, Lect. in Engl. B.A., M.A., N.C. State Univ.
- Leming, Michael Lloyd*, Lect. in Civ. Engr. B.S., N.C. State Univ.; M.S., Univ. of Calif. at Berkeley
- LeNoir, Pennington*, Lect. in Math. B.S., Auburn Univ.; M.A., Univ. of S. Ala.
- Lentz, Vera Blair*, Assoc. Prof. of Engl. B.A., Augustana Coll.; M.A., Ph.D., Univ. of Iowa.
- Leonard, Kurt John*, Prof. (USDA) of Plant Path. B.S., Iowa State Univ.; Ph.D., Cornell Univ.
- Leonard, Rebecca*, Asst. Prof. of Speech-Comm. B.S., Utah State Univ.; M.A., Ph.D., Purdue Univ.
- Lester, Marsha R.*, Lect. in Phys. Ed. B.S., West Va. Univ.; M.S., James Madison Univ.
- Leuba, Richard J.*, Lect. in Mech. & Aero. Engr. B.S., Antioch Coll.; M.S., Univ. of Wash.; Ph.D., Union Grad. School, Antioch Coll.
- Levedahl, J. William*, Asst. Prof. of Econ. & Bus. B.A., Univ. of Calif. at Berkeley; M.Sc., London School of Econ.; Ph.D., Univ. of Chicago.
- Levenbook, Barbara B.*, Assoc. Prof. of Phil. A.B., M.A., Univ. of Rochester; Ph.D., Univ. of Ariz.
- Levere, Nancy Davis*, Adj. Asst. Prof. of Curr. & Instr. B.A., M.S., Ph.D., N.C. State Univ.
- LeVere, Thomas Earl*, Prof. of Psych. B.S., M.A., Ph.D., Ohio State Univ.
- Levi, Michael Phillip*, Prof. of Wood & Paper Sci. & Plant Path. & Spec. in-Charge, Ext. For. Res. B.Sc., Ph.D., Leeds Univ. (England).
- Levi, Patricia Hopper*, Sr. Researcher in Entom. B.A., Univ. of N.C. at Greensboro; Ph.D., Univ. of Leeds, (England).
- Levin, Harold Dresner*, Assoc. Prof. of Phil. B.S., Ph.D., Mass. Inst. of Tech.
- Levin, Lisa A.*, Asst. Prof. of Mar., Earth, & Atmos. Sci. B.A., Radcliffe Coll.; Ph.D., Univ. of Calif. at San Diego.
- Levine, Cynthia Robin*, Lib. & Refer. Lib. A.B., Univ. of N.C. at Chapel Hill; M.S., N.C. State Univ.; M.Ln., Emory Univ.
- Levine, Jay F.*, Asst. Prof. of Microbiol., Path. & Parasit. B.S., Mich. State Univ.; D.V.M., Univ. of Tenn.; M.P.H., Harvard Univ.
- Levine, Joseph*, Asst. Prof. of Phil. B.A., Univ. of Calif. at L.A.; Ph.D., Harvard Univ.
- Levine, Samuel Gale*, Prof. of Chem. B.S., Tufts Univ.; Ph.D., Harvard Univ.
- Levings, Charles Sanford, III*, William Neal Reynolds Prof. of Gen. B.S., M.S., Ph.D., Univ. of Ill.
- Levy, Jack B.*, Adj. Prof. of Text. Chem. B.A., Duke Univ.; M.S., Ph.D., N.C. State Univ.
- Levy, Michael G.*, Assoc. Prof. of Microbiol., Path. & Parasit. B.A., State Univ. of N.Y. at Buffalo Ph.D., Rice Univ.
- Lewis, Leslie E.*, Asst. Tennis Coach. B.A., N.C. State Univ.
- Lewis, William Mason*, Prof. of Crop Sci. B.S., Tex. A & M Coll.; M.S., Ph.D., Univ. of Minn.
- Ley, David H.*, Asst. Prof. of Food Ani. & Equine Med. B.S., Univ. of Calif. at Irvine; M.A., D.V.M., Ph.D., Univ. of Calif. at Davis.
- Lichtenwalner, Richard Ellis*, Assoc. Prof. of Ani. Sci. B.S., Del. Valley Coll.; M.S., Ph.D., Va. Polytech. Inst. and State Univ.
- Liebowitz, Stanley J.*, Assoc. Prof. of Econ. & Bus. B.S., Johns Hopkins Univ.; M.A., Ph.D., Univ. of Calif. at L.A.
- Liles, Richard T.*, Assoc. Prof. Adult & Comm. Coll. Ed. & State Leader of Train. B.S., N.C. State Univ.; M.A.T., Univ. of N.C. at Chapel Hill; Ed.D., N.C. State Univ.
- Lilley, Stephen C.*, Assoc. Prof. of Soc. & Anth. B.A., La. Polytech. Inst. Univ.; M.A., Ph.D., Univ. of Ga.
- Lilly, John Paul*, Ext. Assoc. Prof. of Soil Sci. B.S., M.S., N.C. State Univ.
- Lim, Phooi Kong*, Assoc. Prof. of Chem. Engr. B.S., Cornell Univ.; M.S., Ph.D., Univ. of Ill. at Urbana.
- Lin, Stephen Y.*, Adj. Prof. of Wood & Paper Sci. B.S., Nat'l. Taiwan Univ.; M.S., Univ. of Wash.; Ph.D., N.C. State Univ.
- Linderman, Russell J.*, Asst. Prof. of Chem. B.S., State Univ. of N.Y. at Binghamton; M.S., Ph.D., Univ. of Mich.
- Lindley, David Woodson*, Adj. Instr. in Mech. & Aero. Engr. B.S., M.S., N.C. State Univ.
- Lineback, David R.*, Prof. & Head of Food Sci. B.S., Purdue Univ.; Ph.D., Ohio State Univ.
- Liner, Hugh L.*, Prof. of Econ. & Bus. & Dist. Ext. Chrmn. B.S., M.S., Ph.D., N.C. State Univ.
- Link, Margaret Ann*, Lib. & Coord., Curr. Mat. Ctr., School of Ed. B.S., Cornell Univ.; M.L.S., Fla. State Univ.
- Linker, Harry Michael*, Asst. Prof. of Crop Sci. & Entom. B.S., M.Ag., N.C. State Univ.; Ph.D., Univ. of Fla. at Gainesville
- Linnerud, Ardell Chester*, Assoc. Prof. of Stat. B.S., Wis. State Univ.; M.S., Ph.D., Univ. of Minn.
- Linney, Mary A.*, Couns., Career Plan. & Place. B.A., Winston-Salem State Univ.; M.A., N.C. Central Univ.
- Linthurst, Rick Alan*, Adj. Asst. Prof. of Bot. B.S., Lebanon Valley Coll.; M.S., Ph.D., N.C. State Univ.
- Little, Trevor J.*, Assoc. Prof. of Text. Mgmt. & Tech. B.Sc., Ph.D., Univ. of Leeds.
- Littlejohn, Michael Anthony*, Prof. of Elect. & Comp. Engr. B.S.E.E., M.E.E., Ph.D., N.C. State Univ.
- Littleton, Isaac Thomas*, Dir., D. H. Hill Library, A.B., Univ. of N.C. at Chapel Hill; M.A., Univ. of Tenn.; M.S.L.S., Ph.D., Univ. of Ill.
- Liu, Wen-Tai*, Asst. Prof. of Elect. & Comp. Engr. B.S., Nat'l Chiao-Tung Univ., (Taiwan) M.S., Nat'l Taiwan Univ.; Ph.D., Univ. of Mich.
- Livengood, Charles Dwaine*, Prof. & Head of Text. Chem. B.S., M.S., Ed.D., N.C. State Univ.
- Lloyd, Janice H.*, Ext. Fam. Res. Mgmt. Spec. B.S., Penn. State Univ.; M.Ed., Univ. of Mo.
- Locke, Don C.*, Assoc. Prof. of Counselor Ed. B.S., M.Ed., Tenn. State Univ.; Ed.D., Ball State Univ.
- Lombardi, David J.*, Ext. Spec. & Lect. in Civ. Engr. B.S., Univ. of R.I.; M.S., Colo. State Univ.
- Lomperis, Linda Susan*, Asst. Prof. of Engl. A.B., A.M., Univ. of Ill. at Urbana. Ph.D., Cornell Univ.

- Long, G. Gilbert*, Prof. of Chem. B.A., Indiana Univ.; M.S., N.C. State Univ.; Ph.D., Univ. of Fla.
- Long, Larry W.*, Assoc. Prof. of Speech-Comm. B.A., Northwestern Okla.; M.S., N. Texas State Univ.; Ph.D., Univ. of Okla.
- Long, Raymond Carl*, Prof. of Crop Sci. B.S., M.S., Kan. State Univ.; Ph.D., Univ. of Ill.
- Long, Sotello V.*, Asst. Dir. of Admissions. B.A., M.Ed., N.C. State Univ.
- Longmuir, Ian Stewart*, Prof. of Biochem. B.A., M.A., Cambridge Univ.; M.B.B., Chir., St. Bartholomew's Hospital Med. School.
- Lonikar, Shrikant V.*, Res. Assoc. in Tex. Chem. B.Sc., Vaidyanath Coll. (India); M.Sc., Marathwada Univ. (India); D.Agr., Kyoto Univ. (Japan).
- Loomis, Michael R.*, Adj. Asst. Prof. in Comp. Ani. & Special Spec. Med. B.S., Univ. of Ga.; A.M., Indiana Univ.; D.V.M., Univ. of Calif. at Davis.
- Lord, Peter Reeves*, Abel C. Lineberger Prof. of Text. Engr. & Sci. B.S., Ph.D., D.Sc., Univ. of London.
- Lorenzetti, Michael J.*, Adj. Asst. Prof. of Elect. & Comp. Engr. B.S., Ill. Inst. of Tech.; M.S., Ph.D., Univ. of Texas.
- Love, Carolyn Smiley*, Asst. Prof. in Rec. Res. Adm. B.S., Shaw Univ.; M.S., Ph.D., N.C. State Univ.
- Love, Joel M.*, Adj. Lect. in Ind. Engr. B.S., M.Sc., Ohio State Univ.
- Love, Joseph William*, Prof. of Hort. Sci. B.S., La. State Univ.; M.S., Ph.D., Ohio State Univ.
- Lowe, William Clifford*, Lib. & Asst. Dir. for Ref. Serv., D. H. Hill Library. B.A., Colgate Univ.; M.S.L.S., State Univ. of N. Y. at Geneseo.
- Lowrey, Austin*, Prof. of Prod. Design. B.A.A., M.A.A., Auburn Univ.
- Lubkeman, David Lee*, Asst. Prof. of Elect. & Comp. Engr. B.S.E.E., M.S.E.E., Ph.D., Purdue Univ.
- Lucas, Leon Thomas*, Prof. of Plant Path. B.S., N.C. State Univ.; Ph.D., Univ. of Calif. at Davis.
- Lucovsky, Gerald Ivan*, Univ. Prof. of Phys. and Elect. & Comp. Engr. B.S., M.A., Univ. of Rochester; Ph.D., Temple Univ.
- Luginbuhl, Geraldine H.*, Assoc. Prof. of Microbiol. B.A., Stanford Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- Luginbuhl, James Emory Robinson*, Assoc. Prof. of Psych. B.A., Stanford Univ.; M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Luh, Jiang*, Prof. of Math. B.S., Taiwan Normal Univ.; M.S., Univ. of Neb.; Ph.D., Univ. of Mich.
- Luo, Ren-Chyuan*, Asst. Prof. of Elect. & Comp. Engr. B.S., M.S., Feng-Chia Univ. (Taiwan); M.S., Ph.D., Technische Univ. (Berlin).
- Lyday, Susan Y.*, Ext. Per. Dev. Spec. in Agti. Ext. Serv. Adm. B.S., Mars Hill Coll.; M.Ed., D. Ed., N.C. State Univ.
- Lyle, Mary Lynn*, Asst. Dir. of Univ. Devel. A.B., Sweetbriar Coll.; M.Ed., Ph.D., Univ. of Fla.
- Lytle, Charles F.*, Prof. of Zool. & Teach. Coord. in Biol. Sci. A.B., Wabash Coll.; M.A., Ph.D., Indiana Univ.
- Maas, Richard Preston*, Ext. Spec. Biol. & Agri. Engr. A.B., Bucknell Univ.; M.S., Western Carolina Univ.; M.S.P.H., Univ. of N.C. at Chapel Hill.
- MacCormac, Earl R.*, Adj. Prof. of Ind. Engr. B.E., B.D., M.A., Ph.D., Yale Univ.
- MacKenzie, John Munro, Jr.*, Assoc. Prof. of Microbiol., & Coord. of Electron Micro. Ctr. B.A., Dartmouth Coll.; Ph.D., Harvard Univ.
- MacKethan, Lucinda Hardwick*, Prof. of Engl. B.A., Hollins Coll.; M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- MacKinnon, Douglas A.*, Adj. Prof. in For. B.S., M.F., Yale Univ.
- MacLachlan, Nigel James*, Asst. Prof. of Microbiol., Path. & Parasit. B.V.S., Massey Univ. of New Zealand; M.S., Univ. of Mo.
- MacPhail-Wilcox, Elizabeth S.*, Assoc. Prof. of Ed. Lead. & Prog. Eval. B.S., M.S., Old Dominion Univ.; Ed.D., Texas Tech. Univ.
- Maday, Clarence Joseph*, Assoc. Prof. of Mech. & Aero. Engr. B.S., M.S., Ill. Inst. of Tech.; Ph.D., Northwestern Univ.
- Madren, Margaret J.*, Teach. Tech., Biol. Sci. B.S., N.C. State Univ.
- Magat, Eugene E.*, Adj. Prof. of Text. Chem. B.S., Ph.D., Mass. Inst. of Tech.
- Magill, Michele M.*, Asst. Prof. of For. Lang. & Lit. Baccalau, Lycee Paul Valery Sete (France); Licence, Matrise, Paul Valery Montpellier (France); Ph.D., Univ. of N.C. at Chapel Hill.
- Maidon, Carolyn Houser*, Asst. Affirm. Action Officer. B.S., Okla. State Univ.; M.Ed., N.C. State Univ.
- Main, Alexander Russell*, Prof. of Biochem. B.A., M.A., Queen's Univ. (Canada); Ph.D., Cambridge Univ. (England).
- Main, Charles Edward*, Prof. of Plant Path. B.S., M.S., W. Va. Univ.; Ph.D., Univ. of Wis.
- Mainland, Charles Michael*, Prof. of Hort. Sci. B.S., M.S., Purdue Univ.; Ph.D., Rutgers Univ.
- Majewski, Karen Marie*, Lect. in Engl. B.A., M.A., South Ill. Univ.
- Makiod, Lois A.*, Adj. Asst. Prof. of Psych. B.A., Penn State Univ.; M.S., Ph.D., Univ. of Wis.
- Malami, Linda S.*, Sr. Coord. Coop. Educ. B.A., Christopher Newport Coll.; M.Ed., N.C. State Univ.
- Malazeecheverria, Coro*, Asst. Prof. of For. Lang. & Lit. M.A., Univ. of Barcelona (Spain); Ph.D., Univ. of N.C. at Chapel Hill.
- Malcom, Herbert Rooney, Jr.*, Assoc. Prof. of Civ. Engr. B.S.C.E., M.C.E., Ph.D., N.C. State Univ.
- Malinowski, Arlene C.*, Assoc. Prof. of For. Lang. & Lit. B.A., Montclair State Coll.; M.A., Mich. State Univ.; M.A., Ph.D., Univ. of Mich.
- Mallette, Bruce I.*, Inst. Res. Officer. B.A., M.A.Ed., Wake Forest Univ.
- Malloy-Hanley, Erin K.*, Lect. in Univ. Studies. B.A., Dunbarton Coll.; M.A., Univ. de Montreal; M.A., St. Mary's; Ph.D., McGill Univ.
- Malpiedi, Barbara J.*, Asst. Prof. of Occup. Ed. B.S., M.S., Ohio State Univ.; Ed.D., Va. Polytech. Inst. & State Univ.
- Malstrom, Carl Wayne*, Dir., Comp. Ctr. B.S., Univ. of Tenn.; M.S., Clemson Univ.
- Mani, Kolam Varkey*, Reactor Health Phy. & Lect. in Nucl. Engr. B.S., M.A. Madras Univ. (India); M.S., Fordham Univ.; M.S.P.H., Univ. of N.C. at Chapel Hill; Ph.D., N.C. State Univ.
- Manly, James Hollowell, Jr.*, Team Phys., Athletics. B.S., Univ. of N.C. at Chapel Hill; M.D., Univ. of Pa.
- Mann, Ann Ferguson*, Coord. for Acad. Skills Prog. & Lect. in Engl. B.A., Univ. of N.C. at Chapel Hill; M.S., So. Conn. State Coll.
- Manning, Charles R., Jr.*, Adj. Prof. of Mat. Sci. & Engr. B.S., Fla. St. Univ.; M.S., Va. Poly. Inst.; Ph.D., N.C. State Univ.
- Manning, Thomas O.*, Asst. Prof. of Comp. Ani. & Special Spec. Med. M.S., D.V.M., New York State Coll. of Vet. Med., Cornell Univ.
- Manooch, Charles Samuel, III*, Adj. Assoc. Prof. of Zool. B.S., Campbell Coll.; M.S., Ph.D., N.C. State Univ.
- Manson, Allison Ray*, Prof. of Stat. B.S., Ph.D., Va. Polytech. Inst. & State Univ.
- Mantini, Michael J.*, Instrumentation Tech., Phys. B.S., N.C. State Univ.
- Margolis, Donald Lee*, Adj. Assoc. Prof. of Mech. & Aero. Engr. B.S., Va. Polytech. Inst. & State Univ.; M.S., M.E., Ph.D., Mass. Inst. of Tech.
- Margolis, Stephen E.*, Assoc. Prof. of Econ. & Bus. B.A., Northwestern Univ.; M.A., Ph.D., Univ. of Calif. at Los Angeles.

- Marin, Vicki L.*, Instr. in Aero. Studies. B.S., M.S., East. Ill. Univ.
- Marion, James E.*, Prof. & Head of Poul. Sci. B.S., Berea Coll.; M.S., Univ. of Ky.; Ph.D., Univ. of Ga.
- Mark, Herman F.*, Adj. Prof. of Text. Chem. Ph.D., Univ. of Vienna (Austria).
- Markert, Clement L.*, Distinguished Univ. Res. Prof. of Ani. Sci. B.A., Univ. of Colo.; M.A., Univ. of Calif. at L.A.; Ph.D., Johns Hopkins Univ.
- Marks, Stuart A.*, Lect. in Soc. & Anth. B.Sc., N.C. State Univ.; M.Sc., Ph.D., Mich. State Univ.
- Martin, Joe Alton*, Prof. & Asst. Head of Math. B.S., Southeast Mo. State Coll.; M.A., Univ. of Mo.; Ph.D., N.C. State Univ.
- Marmarose, Vicki L.*, Dir., Stewart Theatre. B.S., Univ. of N.C. at Chapel Hill.
- Marsh, Culpepper Paul*, Prof. of Soc. & Anth. B.S., M.S., N.C. State Univ.
- Marsh, Paul Leslie*, Asst. Statistician in Stat. B.S., M.S., N.C. State Univ.
- Marshall, Jon Clark*, Assoc. Prof. of Ed. Lead. & Prog. Eval. B.S., M.S., Ed.D., Univ. of Kan.
- Marsland, David Boyd*, Prof. of Chem. Engr. B.Ch.E., Ph.D., Cornell Univ.
- Martin, Charles Allen, Jr.*, Dir. of Thompson Theater. B.S., Millersville State Coll.; M.F.A., Univ. of N.C. at Greensboro.
- Martin, Clifford K.*, Asst. Prof. of Soil Sci. B.S., M.S., Univ. of Ky.; Ph.D., Univ. of Ill.
- Martin, Donald Crowell*, Prof. of Comp. Sci. B.S., M.S., Univ. of S. C.; Ph.D., N.C. State Univ.
- Martin, Georgie Edward, Jr.*, Crop Sci. Spec. B.S., N.C. State Univ.
- Martin, LeRoy Brown, Jr.*, Prof. of Math. B.S., Wake Forest Univ.; M.S., N.C. State Univ.; M.S., Ph.D., Harvard Univ.
- Martin, Ray Anthony*, Asst. Basketball Coach. B.A., Notre Dame Univ.
- Martin, Robert H., Jr.*, Prof. of Math. B.S., M.S., Univ. of S.C.; Ph.D., Ga. Inst. of Tech.
- Martin, William Royal, Jr.*, Adj. Asst. Prof. of Text. Chem. B.S., N.C. State Univ.; A.B., M.B.A., Univ. of N.C. at Chapel Hill.
- Martino, Judith A.*, Head Volleyball Coach. B.S., Northeastern Univ.
- Martorella, Peter H.*, Prof. & Head of Curr. & Inst. B.S., M.A., Ph.D., Ohio State Univ.
- Masnari, Nino A.*, Prof. & Head of Elect. & Comp. Engr. B.S.E., M.S.E., Ph.D., Univ. of Mich.
- Massey, Frances Wilson*, Asst. Prof. of Text. Mgmt. & Tech. B.S., E. Carolina Univ.; M.S., Univ. of N.C. at Greensboro.
- Mastro, Joseph Paul*, Assoc. Prof. of Pol. Sci. & Pub. Adm. B.A., Ursinus Coll.; M.A., Ph.D., Penn. State Univ.
- Matthews, Hazel Benton, Jr.*, Adj. Assoc. Prof. of Entom. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of Wis.
- Matthews, Neely Forsyth Jones*, Prof. of Elect. & Comp. Engr. B.S.E., M.S.E., Geo. Wash. Univ.; M.A., Ph.D., Princeton Univ.
- Matzen, Vernon C.*, Assoc. Prof. of Civ. Engr. B.S., Univ. of Colo.; M.S., Purdue Univ.; Ph.D., Univ. of Calif. at Berkeley.
- Matzinger, Dale Frederick*, Prof. of Gen. B.S., M.S., Ph.D., Iowa State Univ.
- Mauk, Craiton S.*, Res. Assoc. in Hort. Sci. B.S., Juniata Coll.; M.S., Univ. of Maine; Ph.D., Ore. State Univ.
- Mauney, Jon*, Asst. Prof. of Comp. Sci. B.S., Univ. of N.C. at Chapel Hill; M.S., Ph.D., Univ. of Wis. at Madison
- Maza, Edward L.*, Ext. Asst. Prof. of 4-H & Youth Devel. B.S., M.A., Northeast Mo. State Univ.; Ph.D., Univ. of Ark.
- Mazwell, E. Stuart*, Asst. Prof. of Biochem. B.S., Ph.D., Univ. of Mass. at Amherst.
- May, Julia Grace*, Asst. Dir. of Dev., Univ. Dev. B.S., Appalachian State Univ.; M.Div., Univ. of the South; M.L.S., George Peabody Coll.
- May, Kenneth N.*, Adj. Prof. of Poul. Sci. B.S., M.S., La. State Univ.; Ph.D., Purdue Univ.
- Mayer, George*, Adj. Prof. of Mat. Engr. & Sci. B.S., Boston Univ.; M.S., Univ. of Okla.; Ph.D., Mass. Inst. of Tech.
- McAllister, David Franklin*, Prof. of Comp. Sci. B.S., Univ. of N.C. at Chapel Hill; M.S., Purdue Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- McBride, Timothy Patrick*, Lect. in Engl. B.S., Rochester Inst. of Tech.; M.A., N.C. State Univ.
- McCants, Charles Bernard*, Prof. of Soil Sci. B.S., M.S., N.C. State Univ.; Ph.D., Iowa State Univ.
- McCarthy, Lambert B.*, Res. Assoc. in Plant Path. B.S., Ph.D., Clemson Univ.; M.S., N.C. State Univ.
- McClain, Jackson Mearns*, Assoc. Prof. of Pol. Sci. & Pub. Adm. B.A., W. Va. Univ.; M.A., Ph.D., Univ. of Ala.
- McClure, Eldon Ray*, Adj. Prof. of Mech. & Aero. Engr. B.S., Wash. State Univ.; M.S., Ohio State Univ.; D. Engr., Univ. of Calif. at Berkeley.
- McClure, William Fred*, Prof. of Biol. & Agri. Engr. B.S., Clemson Univ.; M.S., Ph.D., N.C. State Univ.
- McCollum, Marilyn*, Lect. in Math. B.S., M.S., N.C. State Univ.
- McCollum, Robert Edmund*, Assoc. Prof. of Soil Sci. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of Ill.
- McConnell, Ernest Eugene*, Adj. Assoc. Prof. of Microbiol., Path. & Parasit. M.S., Mich. State Univ.; D.V.M., Ohio State Univ.
- McCormick, Gwendolyn Davis*, Asst. Prof. of Comp. Ani. & Special Spec. Med. B.A., Univ. of N.C. at Greensboro; D.V.M., Univ. of Ga.; M.S., Penn. St. Univ.
- McCraw, Roger Lee*, Assoc. Prof. of Ani. Sci. B.S., M.S., Va. Polytech. Inst. & State Univ.; M.S., Ph.D., N.C. State Univ.
- McCullough, Rex Ben*, Adj. Asst. Prof. of For. B.S., M.S., Okla. State Univ.; Ph.D., Texas A. & M. Univ.
- McCutcheon, Linda Flowers*, Ext. Asst. Prof., Ext. Home Econ. & Assoc. State Leader, Home Econ., B.S., E. Carolina Univ.; M.S., Ph.D., Univ. of N.C. at Greensboro.
- McDaniel, Benjamin Thomas*, Prof. of Ani. Sci. & Gen. B.S., Clemson Univ.; M.S., Univ. of Md.; Ph.D., N.C. State Univ.
- McDaniel, Paul A.*, Instr. in Soil Sci. B.S., Univ. of Ky.; M.S., Mont. State Univ.
- McDermid, Elizabeth Ann*, Asst. Prof. of Econ. & Bus. B.A., Oregon State Univ.; M.E., Ph.D., N.C. State Univ.
- McDonald, Lee Roy*, Assoc. Dir. of Univ. Stud. Cntr. B.S., E. Carolina Univ.; M.Ed., N.C. State Univ.
- McDonald, Patrick Hill, Jr.*, Harrelson Prof. of Civ. Engr. B.S. Engr., N.C. State Univ.; M.S., Ph.D., Northwestern Univ.
- McElroy, Connie M.*, Cont. Ed. Spec. B.A., Univ. of N.C. at Chapel Hill; M.Ed., N.C. State Univ.
- McElroy, Michael B.*, Assoc. Prof. & Asst. Head of Econ. & Bus. A.B., Miami Univ.; Ph.D., Northwestern Univ.
- McFeeters, Roger Floyd*, Prof. (USDA) of Food Sci. B.S., M.S., Mich. State Univ.; Ph.D., Univ. of Calif. at Davis.
- McGeachy, John A., III*, Lib. & Doc. Lib. A.B., Davidson Coll.; M.A., Univ. of Chicago.
- McGee, Beth A.*, Asst. Dir. of Univ. Rel. B.S., Campbell Coll.
- McGraw, James Robert*, Ext. Assoc. Prof. of For. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of Fla.
- McGregor, Ralph*, Cone Mills Prof. of Text. Chem. B.Sc., Ph.D., Univ. of Leeds (England).

- McIlwee, John C.*, Costume Designer, Thompson Theatre. B.S., M.A., M.F.A., W. Va. Univ.
- McKean, William T., Jr.*, Adj. Prof. of Wood & Paper Sci. B.S., Univ. of Colo.; Ph.D., Univ. of Wash.
- McKend, Steven E.*, Asst. Prof. of For. B.S.F., M.S.F., Purdue Univ.; Ph.D., N.C. State Univ.
- McKee, Arnold J.*, Asst. Prof. of Econ. & Bus. B.S., M.B.A., Univ. of Maine; Ph.D., Okla. St. Univ.
- McKenzie, Wendell Herbert*, Prof. of Gen. B.A., Westmar College; M.S., Ph.D., N.C. State Univ.
- McKinney, Claude E.*, Dean & Prof. Sch. of Design. B.A., Univ. of N.C. at Chapel Hill.
- McKinney, Jeana Dunn*, Asst. Coord., Intnat'l. Prog. B.A., Austin Coll.; M.S., Univ. of Ky.
- McKinney, Thearon Thomas*, Assoc. Prof. of 4-H & Youth Devel. & Ext. Spec. B.A., Ouachita Baptist Univ.; M.A., Ph.D., Univ. of Ga.
- McLaughlin, Foil William*, Ext. Prof. of Crop Sci. & Dir. of the N. C. Crop Improv. Assoc. B.S., M.S., N.C. State Univ.
- McLymore, Robert L.*, Ext. Spec. (4-H Safety) in Biol. & Agri. Engr. B.S., Campbell Coll.; M.S., N.C. A & T Univ.
- McMurry, Linda Ott*, Assoc. Prof. of Hist. B.A., M.A., Ph.D., Auburn Univ.
- McMurry, Richard Manning*, Adj. Prof. of Hist. B.A., Va. Military Inst.; M.A., Ph.D., Emory Univ.
- McNaughton, Toni G.*, Asst. Dir. of Housing. B.A., M.Ed., Univ. of Va.
- McPeters, Arnold L.*, Res. Asst. in Chem. Engr. B.S., Ph.D., Univ. of N.C. at Chapel Hill.
- McPherson, Charles W.*, Dir. of Exper. Ani. Med. & Prof. of Comp. Ani. & Special Spec. Med. B.S., D.V.M., Univ. of Minn.; M.P.H., Univ. of Calif. at Berkeley.
- McRae, David Scott*, Assoc. Prof. of Mech. & Aero. Engr. B.S., N.C. State Univ.; M.S., Univ. of Mo.; Ph.D., Air Force Inst. of Techn.
- McRee, Donald Ikerd*, Adj. Prof. of Poul. Sci. B.S., Davidson Coll.; M.S., Coll. of William & Mary; Ph.D., N.C. State Univ.
- McVay, Julie Gagner*, Assoc. Prof. of Counselor Ed. & Ed. Ldrshp. & Prog. Eval. B.A., Antioch Coll.; M.S., Ed.D., N.C. State Univ.
- Meek, Cleo M.*, Adj. Asst. Prof. of Math. & Sci. Ed. B.A., Northeastern State Coll.; Ed.D., Duke Univ.
- Mehrotra, Ravi*, Asst. Prof. of Elect. & Comp. Engr. B.Tech., Indian Inst. of Tech. (India); M.S., Univ. of Hawaii; Ph.D., Carnegie-Mellon Univ.
- Meldau, Elizabeth U.*, Dist. Ext. Dir. in Agri. Ext. Home Ec. B.S.H.E., M.S., Univ. of N.C. at Greensboro.
- Melton, Thoyd*, Assoc. Prof. of Microbiol. B.S., N.C. Central Univ.; Ph.D., Johns Hopkins Univ.
- Memory, Jasper Durham*, Dean & Vice Prov. of Grad. Sch. and Prof. of Phys. B.S., Wake Forest Coll.; Ph.D., Univ. of N.C. at Chapel Hill.
- Mengel, Dennis L.*, Res. Asst. in For. B.S., M.S., Univ. of Idaho.
- Merris, Karen F.*, Lect. in Engl. B.S., Bowling Green State Univ.; M.A., Univ. of Ky.
- Mershon, Donald Hartland*, Assoc. Prof. of Psych. B.A., Franklin & Marshall Coll.; M.A., Ph.D., Univ. of Calif. at Santa Barbara.
- Mershon, Loretta K.*, Lib. & Asst. Head, Serials Dept. B.A., Rutgers Univ.; M.A., Univ. of Calif. at Santa Barbara; M.S.L.S., Univ. of N.C. at Chapel Hill.
- Messere, Carl J.*, Prof. of Econ. & Bus. & Assoc. Head for Acct. B.S., M.A., Appalachian State Univ.; Ph.D., Univ. of S.C.
- Metcalf, Michael Rutherford*, Asst. Prof. of Anat., Physiol. Sci. & Radiol. B.S., D.V.M., Univ. of Ill. at Urbana.
- Metz, Louis John*, Adj. Prof. of For. & Soil Sci. B.S.F., Mich. State Univ.; M.F., Ph.D., Duke Univ.
- Metzger, Robert Stephen*, Assoc. Prof. of Phil. A.B., Univ. of Wis.; M.A., Ph.D., Columbia Univ.
- Meuten, Donald J.*, Assoc. Prof. of Microbiol., Path. & Parasit. B.S., Univ. of Conn.; D.V.M., Cornell Univ.; Ph.D., Ohio State Univ.
- Meyer, Carl Dean, Jr.*, Prof. of Math. A.B., M.S., Ph.D., Colo. State Univ.
- Meyer, John Richard*, Assoc. Prof. of Entom. B.S., Univ. of Ill.; M.S., Ph.D., Cornell Univ.
- Meyer, Peter*, Assoc. Dir., Ctr. for Urban Aff. & Comm. Serv. B.A., Queens Coll.; M.S., Columbia Univ.; Ph.D., N.Y. Univ.
- Meyer, Robert Ernest*, Asst. Prof. of Anat., Physiol. Sci. & Radiol. B.A., State Univ. of New York at Buff.; D.V.M., Cornell Univ.
- Meyers, Julia Reed*, Lect. in Engl. B.A., M.A., N.C. State Univ.
- Meyers, Walter Earl*, Prof. of Engl. B.A., Duquesne Univ.; Ph.D., Univ. of Fla.
- Michaels, Alan S.*, Dist. Univ. Prof. of Chem. Engr. S.B., S.M., Sc.D., Mass. Inst. of Tech.
- Middleton, Peggy Lynn*, Asst. Prof. of Prod. Design. B.A., Meredith Coll.; M.P.D., N.C. State Univ.
- Miles, Marion Lawrence*, Prof. of Chem. & Asst. Head, Lab. & Facilities. B.S., M.S., Univ. of Ga.; Ph.D., Univ. of Fla.
- Miholland, Robert Donald*, Prof. of Plant Path. B.S., M.S., Okla. State Univ.; Ph.D., Univ. of Minn.
- Miller, Alice R.*, Dir., Human Res. B.S., M.S., Cornell Univ.
- Miller, Carolyn Rae*, Assoc. Prof. of Engl. B.A., M.A., Penn. State Univ.; Ph.D., Rensselaer Polytech. Inst.
- Miller, Conrad Henry*, Prof. of Hort. Sci. B.S., M.S., Va. Polytech. Inst. & State Univ.; Ph.D., Mich. State Univ.
- Miller, Dale Clayton*, Ext. Spec., Ani. Sc. B.S., N.C. State Univ.
- Miller, Dan Clinton*, Asst. Prof. of Engl. B.A., Univ. of Co.; Ph.D., Univ. of Iowa.
- Miller, David M., III*, Asst. Prof. of Zool. B.S., Univ. of S. Miss.; Ph.D., Rice Univ.
- Miller, Eric S.*, Asst. Prof. of Microbiol. B.A., Calif. State Univ.; Ph.D., Purdue Univ.
- Miller, Garry Dale*, Assoc. Dir., Nucl. Reactor Prog., Nucl. Engr. B.S., M.M.E., N.C. State Univ.
- Miller, Grover Cleveland*, Prof. & Teach. Coord. of Zool. A.B., Berea Coll.; M.S., Univ. of Ky.; Ph.D., La. State Univ.
- Miller, John M.*, Prof. of Zool. & Mar., Earth & Atmos. Sci. A.B., Indiana Univ.; M.A., Univ. of Tex. at Austin; Ph.D., Univ. of Wis. at Madison.
- Miller, Joseph E.*, Assoc. Prof. (USDA) of Crop Sci. B.S., M.S., Colo. State Univ.; Ph.D., Utah State Univ.
- Miller, Norman A., III*, Coord., Res. Scholars Prog. B.Me., E. Carolina Univ.; M.A., N.C. State Univ.
- Miller, Robert H.*, Prof. & Head of Soil Sci. B.S., Univ. of Wis.; M.S., Ph.D., Univ. of Minn.
- Miller, Thomas Kenan, III*, Asst. Prof. of Elect. & Comp. Engr. B.A., M.S., Ph.D., Univ. of N.C. at Chapel Hill.
- Miller, William Laubach*, Prof. of Biochem. B.S., Bucknell Univ.; M.S., Ph.D., Cornell Univ.
- Mills, Joan S.*, Coord. of Advising, Univ. Undes. Freshmen B.A., Univ. of Penn.; M.A., Appalachian State Univ.
- Miner, Gordon Stanley*, Prof. of Soil Sci. B.S., M.S., Mich. State Univ.; Ph.D., N.C. State Univ.
- Mink, James Walter*, Adj. Assoc. Prof. of Elect. & Comp. Engr. B.S., M.S., Ph.D., Univ. of Wis.
- Mirabelli, John G.*, Asst. Baseball Coache & Box Off. Asst. B.A., N.C. State Univ.
- Misra, Kailash C.*, Asst. Prof. of Math. B.A., M.A., Utkal Univ. (India); Ph.D., Rutgers Univ.
- Mitchell, Gary Earl*, Prof. & Assoc. Head of Physics. B.S., Univ. of Louisville; M.A., Duke Univ.; Ph.D., Fla. State Univ.
- Mitchell, Karllyn*, Asst. Prof. of Econ. & Bus. B.A., B.B.A., Univ. of Tex.; A.M., Ph.D., Univ. of Mich.

- Mixon, Forest O.*, Adj. Prof. of Chem. Engr. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of Del.
- Moazed, Khosrow Louis*, Prof. of Metallurg. Engr. B.S., M.S., Rensselaer Polytech. Inst.; Ph.D., Carnegie Inst. of Tech.
- Mochrie, Richard Douglas*, Prof. of Ani. Sci. B.S., M.A., Univ. of Conn.; Ph.D., N.C. State Univ.
- Mock, Gary N.*, Assoc. Prof. & Asst. Head of Text. Chem. B.S., Va. Polytech. Inst. & State Univ.; M.S., Ph.D., Clemson Univ.
- Mock, Judith Elizabeth*, Ext. Asst. Prof. & Spec. in Charge, Human Envir. B.S., M.S., Univ. of N.C. at Greensboro; Ed.D., N.C. State Univ.
- Mock, Steven James*, Adj. Assoc. Prof. of Mar., Earth and Atmos. Sci. B.A., Antioch Coll.; M.A., Dartmouth Coll.; Ph.D., Northwestern Univ.
- Mohamed, Mansour H. M.*, Prof. of Text. Engr. & Sci. & Assoc. Dean for Acad. Prog., Sch. of Text. B.S., Univ. of Alexandria (Egypt); Ph.D., Manchester Coll. of Sci. & Tech. (England).
- Mohapatra, Subhas C.*, Sr. Res. in Biol. & Agri. Engr. B.S., Bhadrak Coll. & Ravenshaw Coll. (India); M.S., Ravenshaw Coll.; Ph.D., N.C. State Univ.
- Molinos, Vicente A.*, Ext. Spec., For. Engr., Univ. de Chile; M.S., Univ. of Calif. at Berkeley.
- Moll, Robert Harry*, Prof. of Gen. & Hort. Sci. B.S., Cornell Univ.; M.S., Univ. of Idaho; Ph.D., N.C. State Univ.
- Monaco, Thomas Joseph*, Prof. of Hort. Sci. B.S., Rutgers Univ.; M.S., Ph.D., N.C. State Univ.
- Monahan, John F.*, Assoc. Prof. of Stat., B.S., M.S., Ph.D., Carnegie-Mellon Univ.
- Moncol, Daniel James*, Prof. of Microbiol., Path. & Parasit. B.S., Va. Polytech. Inst. & State Univ.; D.V.M., Univ. of Ga.
- Monteith, Larry King*, Dean of Sch. of Engr. & Prof. of Elect. & Comp. Engr. B.S., N.C. State Univ.; M.S., Ph.D., Duke Univ.
- Montgomery, Charles A., Jr.*, Adj. Assoc. Prof. of Microbiol., Path., and Parasit. B.S., D.V.M., Okla. State Univ.
- Moon, Donald W.*, Adj. Assoc. Prof. of Mech. & Aero. Engr. B.S., M.S., Univ. of Ill. at Urbana; Ph.D., Calif. Inst. of Tech.
- Moore, Catherine Elizabeth*, Assoc. Prof. of Engl. A.B., Meredith Coll.; M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Moore, Charles L.*, Prof. & Assoc. Dept. Head, Econ. & Bus. B.S., Ohio State Univ.; M.S., Ph.D., Univ. of Ill.
- Moore, Harry Ballard, Jr.*, Prof. of Entom. & Wood & Paper Sci. B.A., E. Carolina Univ.; M.S., Purdue Univ.; Ph.D., N.C. State Univ.
- Moore, Martha Williams*, Acad. & Career Adv., Sch. of Agri. & Life Sci. B.A., M.Ed., N.C. State Univ.
- Moore, Robin Clive*, Assoc. Prof. of Land. Arch. D.Arch., Univ. Coll. at London; M.C.P., Mass. Inst. of Tech.
- Moreau, David H.*, Dir., Water Res. Research Inst. & Adj. Prof. of Civil Engr. B.Sc., Miss. State Univ.; M.Sc., N.C. State Univ.; M.Sc., Ph.D., Harvard Univ.
- Moreland, Charles Glen*, Prof. of Chem. & Asst. Head, Grad. Stud., B.S., M.S., Ph.D., Univ. of Fla.
- Moreland, Donald Edwin*, Prof. (USDA) of Bot. & Crop Sci. & For. B.S., M.S., Ph.D., N.C. State Univ.
- Morgan, Dexter William, Jr.*, Rad. Prot. Officer. B.A., Berea Coll.; M.S., N.C. State Univ.
- Morrison, John M.*, Assoc. Prof. of Mar., Earth & Atmos. Sci. B.A., Holy Cross; M.S., Ph.D., Texas A&M Coll.
- Moseley, Robert G.*, Staff Phys., Stud. Health Serv. B.A., M.D., Duke Univ.
- Mooser, Leon Sigmon*, Ext. Spec. in Text. Ext. B.S., N.C. State Univ.
- Moses, James Harold*, Adj. Asst. Prof. of Rec. Res. Adm. B.A., M.S., Univ. of N.C. at Chapel Hill.
- Moss, Arthur Broadus*, A.G. Myers Prof. in Text. Mgmt. & Econ. A.B., Univ. of N.C. at Chapel Hill; M.B.A., Columbia Univ.; D.B.A., Harvard Univ.
- Mott, Ralph Lionel*, Prof. of Bot. & Hort. Sci. B.S., M.S., Univ. of Utah; Ph.D., Cornell Univ.
- Mowat, J. Richard*, Assoc. Prof. of Phys. A.B., Ph.D., Univ. of Calif. at Berkeley.
- Mowrey, Robert Alger, Jr.*, Asst. Prof. of Ani. Sci. B.S., Delaware Valley Coll.; M.S., Ph.D., Penn. State Univ.
- Moxley, Robert Lonnie*, Prof. of Soc. & Anth. B.S., Fla. State Univ.; M.Ed., Springfield Coll.; Ph.D., Cornell Univ.
- Moyer, James William*, Assoc. Prof. of Plant Path. B.S., Wash. State Univ.; M.S., Ph.D., Penn. State Univ.
- Mozley, Samuel C.*, Assoc. Prof. of Zool. B.S., M.S., Ph.D., Emory Univ.
- Mrozek, Edward, Jr.*, Ext. Spec., Agri. Ext. B.S., Springfield Coll.; M.S., Long Island Univ.; Ph.D., N.C. State Univ.
- Mueller, James Paul*, Prof. of Crop Sci. B.S., M.S., Univ. of Del.; Ph.D., Penn. State Univ.
- Mulholland, James Andrew*, Assoc. Prof. of Hist. B.S., Mass. Inst. of Tech.; M.S., Univ. of Bridgeport; M.A., Wesleyan Univ.; Ph.D., Univ. of Del.
- Mulligan, James Colvin*, Prof. of Mech. & Aero. Engr. B.S.M.E., Univ. of Fla.; M.S., Univ. of Miss.; Ph.D., Tulane Univ.
- Mullin, Robert B.*, Asst. Prof. of Rel. A.B., Coll. of Wm. & Mary; M.A.R., M.A., M. Phil., Ph.D., Yale Univ.
- Mullins, Michael E.*, Adj. Assoc. Prof. of Chem. Engr. B.ChE., M.S., Ga. Inst. of Tech.; Ph.D., Univ. of Rochester.
- Munger, Laddie L.*, Adj. Assoc. Prof. of Food Ani. & Equine Med. B.S., Univ. of Mo.; M.S., Kan. State Univ.; D.V.M., Univ. of Mo.
- Munn, Harry Eugene, Jr.*, Assoc. Prof. of Speech-Comm. B.S., Wis. State Univ.; M.A., Bradley Univ.; Ph.D., Univ. of Kan.
- Murphy, Joseph Paul*, Asst. Prof. of Crop Sci. B.A., Univ. Coll. (Dublin, Ireland); M.S., Ph.D., Iowa State Univ.
- Murray, James D.*, Dir. of Mar. Adv. Serv., Sea Grant Prog. B.A., Syracuse Univ.; M.S., State Univ. of N.Y.
- Murty, K. Linga*, Prof. of Nuc. Engr. B.Sc., M.Sc., Andha Univ. (India); M.Sc., Ph.D., Cornell Univ.
- Mustian, Robert David*, Prof. of Adult & Comm. Coll. Ed. & Soc. & Anth. B.S., M.S., N.C. State Univ.; Ph.D., Fla. State Univ.
- Myketa, Larysa Anna*, Asst. Prof. of For. Lang. & Lit. B.A., M.A., Ohio State Univ.; Ph.D., State Univ. of New York at Buff.
- Naderman, George C.*, Assoc. Prof. of Soil Sci. B.S., M.S., Purdue Univ.; Ph.D., Cornell Univ.
- Nagel, Robert T.*, Assoc. Prof. of Mech. & Aero. Engr. B.S., M.S., Penn. State Univ.; Ph.D., Univ. of Conn.
- Nagle, H. Troy, Jr.*, Prof. of Elect. & Comp. Engr. B.S.E.E., M.S.E.E., Univ. of Ala.; Ph.D., Auburn Univ.; M.D., Univ. of Miami.
- Namkoong, Gene*, Prof. (USFS) of Gen. & For. B.S., M.S., State Univ. of N. Y.; Ph.D., N.C. State Univ.
- Narayan, Jagdish*, Prof. of Mat. Sci. & Engr. B.S., I.I.T. (Kanpur, India); M.S., Ph.D., Univ. of Calif. at Berkeley.
- Nasise, Mark P.*, Asst. Prof. of Comp. Ani. & Special Spec. Med. B.S., D.V.M., Kansas State Univ.
- Nau, James Michael*, Asst. Prof. of Civil Engr. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of Ill. at Urbana.
- Neal, Robert A.*, Adj. Prof. of Entom. B.S., Univ. of Denver; Ph.D., Vanderbilt Univ.
- Negishi, Masahiko*, Adj. Assoc. Prof. of Anat., Physiol. Sci. & Radiol. B.S., Kyoto Phar. Coll.; M.S., Ph.D., Osaka Univ.

- Nelson, Lawrence Alan*, Prof. of Stat. & For. B.S., Iowa State Univ.; M.S., Tex. A & M Univ.; Ph.D., N.C. State Univ.
- Nelson, Paul Victor*, Prof. of Hort. Sci. B.S., Univ. of Mass.; M.S., Penn. State Univ.; Ph.D., Cornell Univ.
- Nemanich, Robert J.*, Assoc. Prof. of Phys. B.S., M.S., No. Ill. Univ.; Ph.D., Univ. of Chicago.
- Neuman, Duane Fredrick*, Ext. Prof. of Econ. B.S., M.S., Univ. of Neb.; Ph.D., Univ. of Ill.
- Neunzig, Herbert Henry*, Prof. of Entom. B.S., M.S., Ph.D., Cornell Univ.
- Newby, Gordon Darnell*, Assoc. Prof. of Hist. B.A., Univ. of Utah; M.A., Ph.D., Brandeis Univ.
- Newman, Slater Edmund*, Prof. of Psych. B.S., Univ. of Penn.; M.A., Boston Univ.; Ph.D., Northwestern Univ.
- Newmark, Craig M.*, Asst. Prof. of Econ. & Bus. B.A., George Wash. Univ.; C.Phil., Ph.D., Univ. of Calif. at Los Angeles.
- Nickel, Paul Adrian*, Prof. of Math. Sc.B., Brown Univ.; Sc.M., N. Y. Univ.; Ph.D., Univ. of Calif. at L.A.
- Nickerson, Gifford Spruce*, Assoc. Prof. of Soc. & Anth. A.B., Wheaton Coll.; M.A., Northwestern Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- Nichols, Nancy K.*, Prof. of Math. B.A., Harvard Univ.; Dipl. Adv. Math., Ph.D., Oxford Univ.
- Nilsson, Arne*, Assoc. Prof. of Elect. & Comp. Engr. M.E.E., Ph.D., Lund Inst. of Tech. (Sweden).
- Nittrover, Charles A.*, Assoc. Prof. of Mar., Earth & Atmos. Sci. B.A., Lafayette Coll.; M.S., Ph.D., Univ. of Wash.
- Noble, Richard L.*, Prof. of Zool. & For. & Coord., Fish. & Wildlife. B.S., M.S., Iowa St. Univ.; Ph.D., Cornell Univ.
- Noga, Edward Joseph*, Asst. Prof. of Comp. Ani. & Special Spec. Med. B.S., M.S., Fla. Atlantic Univ.; D.V.M., Univ. of Fla.
- Norris, Larry Keith*, Asst. Prof. of Math. B.A., Univ. of Calif. at Berkeley; Ph.D., N.C. State Univ.
- Nuttle, Henry Lee Williamson*, Assoc. Prof. of Ind. Engr. B.S., Dickinson Coll.; Ph.D., Johns Hopkins Univ.
- Nychka, Douglas William*, Asst. Prof. of Stat. B.A., Duke Univ.; Ph.D., Univ. of Wis. at Madison.
- Oblinger, James L.*, Prof. of Food Sci. & Dean, School of Agri. & Life Sci. B.A., DePauw Univ.; M.S., Ph.D., Iowa State Univ.
- O'Brien, Roberta Gail*, Assoc. Prof. of Hist. A.B., Meredith Coll.; M.A., Tulane Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- O'Cain, Thomas M.*, Asst. Football Coach. B.S., Clemson Univ.
- Ocko, Jonathan Kevin*, Assoc. Prof. of Hist. B.A., Trinity Coll.; M.A., M.Phil., Ph.D., Yale Univ.
- O'Connell, Kevin Brent*, Assoc. Ath. Dir. B.S., Va. Polytech Inst. & State Univ.; M.Ed., Ohio Univ.
- Ocorr, Jerome H.*, Dev. Off. A.B., Middleburg Coll.
- Oglesby, Charles L.*, Counselor, Couns. Ctr. B.A., Univ. of Tex. at Austin; M.A., Univ. of Ky.; Ed.D., N.C. State Univ.
- Olander, Karen A.*, Lect. in Engl. B.A., M.A., Univ. of Tex. at Austin.
- Oldham, Connie Sue B.*, Asst. Prof. of Ind. Engr. B.A., Meredith Coll.; M.S., Ph.D., N.C. State Univ.
- Olj, Heinz Gunter*, Prof. of Wood & Paper Sci. & Text. Chem. B.S., M.S., Ph.D., Tech. Univ. (Munich, W. Germany).
- Ollis, David F.*, Prof. of Chem. Engr. B.S., Calif. Inst. of Tech.; M.S., Northwestern Univ.; Ph.D., Stanford Univ.
- Olson, David John*, Adj. Asst. Prof. of Hist. B.A., Hastings Coll.; M.A., Univ. of Neb.
- Olson, Gail I.*, Asst. Track Coach. B.S., Univ. of Ill. at Champaign.
- Olson, Neil C.*, Assoc. Prof. of Anat., Physiol. Sci. & Radiol. B.S., D.V.M., Univ. of Minn.; Ph.D., Mich. State Univ.
- O'Neal, John Benjamin, Jr.*, Prof. of Elect. & Comp. Engr. B.Engr., Ga. Inst. of Tech.; M.Engr., Univ. of S. C.; Ph.D., Univ. of Fla.
- Ormond, Isaac Franklin, III*, Lect. in Phys. Ed. B.A., Univ. of N.C. at Chapel Hill.
- Orndorff, Paul E.*, Asst. Prof. of Microbiol., Path. & Parasit. B.A., Knox Coll.; M.S., Univ. of Montana; Ph.D., Univ. of Minn. at Duluth.
- Ort, Jon Frederick*, Assoc. Prof. of Poul. Sci. B.S., M.S., Ph.D., Ohio State Univ.
- Osburn, Carlton Morris*, Prof. of Elect. & Comp. Engr. B.S., M.S., Ph.D., Purdue Univ.
- Osegueda, Laura Margaret*, Lib. & Ref. Lib. B.S., Calif. State Univ.; M.L.S., Univ. of Calif. at Berkeley.
- O'Sullivan, Elizabethann*, Assoc. Prof. of Pol. Sci. & Pub. Adm. B.A., Dunbarton Coll. of Holy Cross; M.A., Ph.D., Univ. of Md.
- O'Sullivan, Joan N.*, Res. Asst. in Elect. & Comp. Engr. Otto, Luther B., Prof. & Head of Soc. & Anth. B.A., Concordia Sen. Coll.; M.Div., Concordia Theo. Sem.; M.S., Ph.D., Univ. of Wis. at Madison.
- Overcash, Michael Ray*, Prof. of Chem. Engr. B.S., N.C. State Univ.; M.S., Univ. of New South Wales (Australia); Ph.D., Univ. of Minn.
- Overton, Margery Frances*, Asst. Prof. of Civil Engr. B.S., M.S., Ph.D., Duke Univ.
- Owen, W. James*, Lect. in Engl. B.A., M.A., N.C. State Univ.
- Ozender, Wayne D.*, Prof. & Head of Food Ani. & Equine Med. B.S., D.V.M., Ph.D., Mich. State Univ.
- Ozisik, Mehmet Necati*, Prof. of Mech. Engr. B.S., Ph.D., Univ. of London.
- Padgett, Lynn Boyd*, Pub. Ed., Agri. Comm. B.A., Brown Univ.; M.A., Univ. of Chicago; M.A., Univ. of Ark.
- Paesler, Michael Arthur*, Assoc. Prof. of Phys. B.A., Beloit Coll.; M.S., Ph.D., Univ. of Chicago.
- Page, Lavon Barry*, Assoc. Prof. of Math. A.B., Univ. of N.C. at Chapel Hill; Ph.D., Univ. of Va.
- Page, Rodney L.*, Asst. Prof. of Comp. Ani. & Special Spec. Med. B.A., Univ. of Colo.; M.S., Georgetown Univ.; D.V.M., Colo. St. Univ.
- Pai, Girish Anant*, Res. Asst. in Text. Engr. & Sci. B.Tx., Univ. of Bombay; M.S., N.C. State Univ.
- Paisley, Michael James*, Res. Asst. in Mat. Sci. & Engr. B.S., Va. Polytech. Inst. & State Univ.
- Palmer, Janet T.*, Lect. in Engl. B.A., N.C. State Univ.
- Palmour, Hayne, III*, Prof. & Assoc. Head of Mat. Sci. & Engr. B.Cer.E., M.S., Ga. Inst. of Tech.; Ph.D., N.C. State Univ.
- Palmquist, Raymond B.*, Assoc. Prof. of Econ. & Bus. B.S., Univ. of Colo.; M.S., Ph.D., Univ. of Wash.
- Pandich, Michael F.*, Adj. Prof. of Speech-Comm. B.S., Syracuse Univ.
- Panee, Eli Douglas, Jr.*, Dir. of Spec. Proj./King Vill. B.A., Univ. of Hawaii.
- Pantula, Sastry G.*, Asst. Prof. of Statistics. B.Stat., M.Stat., Indian Stat. Inst.; Ph.D., Iowa St. Univ.
- Pao, Chia-Ven*, Prof. of Math. B.S., Nat'l Taiwan Univ.; M.S., Kan. State Univ.; Ph.D., Univ. of Pitt.
- Pappas, Nicholas A.*, Athl. Trainer. B.S., Va. Commonwealth Univ.
- Park, Jae Young*, Prof. of Phys. B.S., Seoul Nat'l Univ. (Korea); M.S., Rensselaer Polytech. Inst.; Ph.D., Univ. of N.C. at Chapel Hill.
- Parker, Beulah M.*, Assoc. Prof. of Entom. B.S., Elizabeth City State Univ.; M.S., Ill. State Univ.; Ph.D., Univ. of Ill.
- Parker, Charles Alexander*, Prof. of Speech-Comm. A.B., Muhlenberg Coll.; M.A., Temple Univ.; Ph.D., La. State Univ.
- Parker, George William, III*, Assoc. Prof. of Phys. B.A., Univ. of the South; Ph.D., Univ. of S.C.
- Parker, John Wilmer, Jr.*, Sr. Ext. Area Swine Spec., Agri. Ext. Serv. B.S., M.S., N.C. State Univ.

- Parker, S. Thomas*, Assoc. Prof. of Hist. B.A., Trinity Univ.; M.A., Ph.D., Univ. of Calif. at L.A.
- Parker, Sallie L.*, Acting Coord. Instr. Telev. Fixed Ser.
- Parkhurst, Carmen Robert*, Prof. of Poul. Sci. B.S., M.S., Ph.D., Ohio State Univ.
- Parks, Leo W.*, Prof. & Head of Microbiol. B.S., Univ. of Ill.; M.S., Ind. Univ.; Ph.D., Univ. of Wash.
- Parramore, Barbara Mitchell*, Prof. of Curr. & Instruction. A.B., Univ. of N.C. at Greensboro; M.Ed., N.C. State Univ.; Ed.D., Duke Univ.
- Parrish, Phillip A.*, Adj. Asst. Prof. of Mat. Sci. & Engr. B.S., M.S., Ph.D., Univ. of Fla.
- Paschal, Mary*, Prof. of For. Lang. & Lit. B.A., Wake Forest Coll.; M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Pasour, Ernest Caleb, Jr.*, Prof. of Econ. B.S., M.S., N.C. State Univ.; Ph.D., Mich. State Univ.
- Patch, Charles E.*, Asst. Prof. of Phys. Ed. B.S., State Univ. Coll. at Cortland, N. Y.; M.S., Univ. of Ore.
- Pate, Joseph D.*, Asst. Football Coach. B.A., M.A., Univ. of Ala.
- Patra, Amit L.*, Adj. Asst. Prof. of Mech. & Aero. Engr. B.S., Calcutta Univ.; M.S., Ph.D., N.C. State Univ.
- Pattee, Harold Edward*, Prof. (USDA) of Bot. & Food Sci. B.S., Brigham Young Univ.; M.S., Utah State Univ.; Ph.D., Purdue Univ.
- Patterson, Bishop Marvin*, Adj. Asst. Prof. of Occup. Ed. B.S., Va. State Coll.; M.S., New York Univ.; Ed.D., N.C. State Univ.
- Patterson, David T.*, Adj. Prof. of Crop Sci. B.S., N.C. State Univ.; A.M., Ph.D., Duke Univ.
- Patterson, Robert Preston*, Prof. of Crop Sci. B.S., M.S., N.C. State Univ.; Ph.D., Cornell Univ.
- Patterson, Ruth M.*, Asst. Prof. of Occup. Ed. B.S., Wingate Coll.; M.Ed., Univ. of Ala., Ph.D., N.C. State Univ.
- Patterson, Sue P.*, Lect. in Occup. Ed. B.S., M.Ed., N.C. State Univ.
- Patty, Donald E.*, Asst. Registrar, Reg. & Records. B.A., Central Coll.; M.Ed. Univ. of Neb.; M.Div., South-eastern Baptist Theo. Sem.
- Patty, Richard Roland*, Prof. & Head of Phys. B.S., Furman Univ.; M.A., Vanderbilt Univ.; Ph.D., Ohio State Univ.
- Paulos, John James*, Asst. Prof. in Elect. & Comp. Engr. B.S., M.S., Ph.D., Mass. Inst. of Tech.
- Paur, Sandra O.*, Asst. Prof. of Math. B.S., Univ. of N. Dakota; M.A., Ph.D., Indiana Univ.
- Pause, Michael*, Prof. of Design. B.Arch., M.Arch., Wash. Univ.; Ph.D., Mass. Inst. of Tech.
- Pawlicki, Elizabeth A.*, Asst. Dir., Res. Life. B.S.F., M.S., W. Va. Univ.
- Payne, Gary Alfred*, Assoc. Prof. of Plant Path. B.S., N.C. State Univ.; M.S., Ph.D., Cornell Univ.
- Peace, Robert Lynn*, Lect. in Econ. & Bus. B.S., Penn. State Univ.; M.B.A., N.Y. Univ.; J.D., New York Univ. Law Sch.
- Pearce, Douglas K.*, Assoc. Prof. of Econ. & Bus. B.A., Univ. of Victoria, B.C.; M.A., Ph.D., Univ. of Wis.
- Pearson, Richard Gustave*, Prof. of Ind. Engr. B.S., M.S., Purdue Univ.; Ph.D., Carnegie Inst. of Tech.
- Pearson, Ronald Gray*, Prof. of Wood & Paper Sci. B.C.E., B.A., M. Engr., Melbourne Univ. (Australia).
- Peebles, Edgar David*, Lect. in Ind. Engr. B.S., N.C. State Univ.
- Peebles-Wilkins, Wilma C.*, Assoc. Prof. of Soc. Work. A.B., N.C. State Univ.; M.S., Case West. Reserve Univ.
- Peedin, Gerald F.*, Assoc. Prof. of Crop Sci. B.S., M.S., Ph.D., N.C. State Univ.
- Peeler, Ralph James, Jr.*, Prof. of Econ. & Bus. B.S., M.S., Ph.D., N.C. State Univ.
- Peet, Mary Monnig*, Assoc. Prof. of Hort. Sci. B.A., Hiram Coll.; M.S., Univ. of Wis. at Madison; Ph.D., Cornell Univ.
- Peiffer, Robert L., Jr.*, Adj. Assoc. Prof. of Microbiol., Path. & Parasit. B.S., D.V.M., Ph.D., Univ. of Minn.
- Pepper, William Donald*, Res. Asst. (USFS) in For. B.S.F., Auburn Univ.; M.F., N.C. State Univ.
- Perdue, Richard R.*, Asst. Prof. of Rec. Res. Admin. & For. B.S., M.S., Univ. of Wyo.; Ph.D., Texas A&M Univ.
- Peretti, Steven W.*, Lect. in Chem. Engr. B.S., Yale Univ.
- Perkins, John Noble*, Prof. of Mech. Engr. B.S., M.S., Ph.D., Va. Polytech. Inst. & State Univ.
- Perrin, Richard K.*, Prof. of Econ. & Bus. & Assoc. Head, Agri. Res. & Teach. Prog. B.S., Ph.D., Iowa State Univ.
- Perros, Harry G.*, Assoc. Prof. of Comp. Sci. B.A., Athens Univ.; M.Sc., Leeds Univ.; Ph.D., Trinity Coll. of Dublin.
- Perry, Jerome John*, Prof. of Microbiol. B.S., Penn. State Univ.; Ph.D., Univ. of Tex.
- Perry, Katharine Browne*, Assoc. Prof. of Hort. Sci. & Ext. Agri. Meteor. Spec. B.S., M.S., Ph.D., Penn. State Univ.
- Perry, Stephanie T.*, Res. Assoc., Microbiol., Path. & Parasit. B.S., E. Cen. Okla. State Univ.; Ph.D., Univ. of Tenn. at Oak Ridge.
- Perry, Thomas Oliver*, Prof. of For., Gen., & Land. Arch. B.S., M.A., Ph.D., Harvard Univ.
- Peters, David S.*, Adj. Assoc. Prof. of Zool. B.S., Utah State Univ.; M.S., Ph.D., N.C. State Univ.
- Petersen, Keith Stuart*, Assoc. Prof. of Pol. Sci. & Pub. Adm. B.A., Williams Coll.; Ph.D., Univ. of Chicago.
- Peterson, Elmor L.*, Prof. of Math. B.S., M.S., Ph.D., Carnegie-Mellon Univ.
- Peterson, Karen R.*, Exec. Asst. to the Chanc. B.A., Univ. of Redlands; A.M., Univ. of Chicago.
- Peterson, Richard Eric*, Assoc. Prof. of Occup. Ed. B.A., Wake Forest Univ.; M.Ed., N.C. State Univ.; Ed.D., W. Va. Univ.
- Petrea, Howard Aldridge*, Assoc. Prof. of Math. B.S., Guilford Coll.; M.A., Univ. of N.C. at Chapel Hill.
- Petters, Robert B.*, Asst. Dir. of Music. B.M., Lawrence Coll.; M.M., Ph.D., Univ. of Mich.
- Petters, Robert Michael*, Assoc. Prof. of Ani. Sci. B.A., Univ. of Del.; M.S., Ph.D., N.C. State Univ.
- Pettis, Bobby Dennis*, Dir. of Minority Stud. Serv., Sch. of Engr. B.S., N.C. Central Univ.; M.A., E. Carolina Univ.
- Pettis, Joyce O.*, Asst. Prof. of Engl. B.A., Winston-Salem State Univ.; M.A., E. Carolina Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- Pettus, Kenneth R.*, Asst. Football Coach. B.A., Newberry Coll.; M.Ed., Furman Univ.
- Pharr, David Mason*, Prof. of Hort. Sci. B.S., M.S., Univ. of Ark.; Ph.D., Univ. of Ill.
- Phillips, Joseph Allen*, Prof. of Soil Sci. & Asst. Dir. of N.C. Agri. Ext. Ser. B.S., Univ. of Tenn.; M.S., Ph.D., Iowa State Univ.
- Phillips, Richard B.*, Adj. Assoc. Prof. of Wood & Paper Sci. B.S., M.S., Ph.D., N.C. State Univ.
- Philpot, Richard M.*, Adj. Prof. of Entom. B.S., Calif. State Coll.; Ph.D., N.C. State Univ.
- Pierce, Christine M.*, Assoc. Prof. of Phil. A.B., Nyack Coll.; Ph.D., Syracuse Univ.
- Pietrafesa, Leonard Joseph*, Prof. of Mar., Earth & Atmos. Sci. B.S., Fairfield Univ.; M.S., Univ. of Chicago; Ph.D., Univ. of Wash.
- Pilkington, Dwain H.*, Ext. Assoc. Prof. of Food Sci. B.S., Kansas State Coll.; M.S., Ph.D., Oklahoma State Univ.
- Pitman, Ronnie A.*, Lib. & Acq. Mono. Lib. B.A., Univ. of Tex. at Austin; B.A., Univ. of N.M.; M.S.L.S., Univ. of N.C. at Chapel Hill.
- Pittman, Beryl Cox*, Lect. in Engl. B.S., Appalachian State Univ.
- Pittman, Kenneth Bryan*, Learning Res. Spec., Sch. of Design. B.S., Appalachian St. Univ.

- Pizer, Morton E.*, Staff Phys., Stud. Health Serv. M.D., Univ. of Louisville.
- Place, Jeffrey Wayne*, Assoc. Prof. of Design. B.S., Duke Univ.; M.Arch., N.C. State Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- Plemmons, Robert James*, Prof. of Math. & Comp. Sci. B.S., Wake Forest Univ.; M.S., Ph.D., Auburn Univ.
- Poindester, Julius Carl, Jr.*, Assoc. Prof. of Econ. & Bus. B.S., Univ. of Va.; Ph.D., Univ. of N.C. at Chapel Hill.
- Poling, Edward Barclay*, Assoc. Prof. of Hort. Sci. B.A., Coll. of William & Mary; M.S., Ph.D., Cornell Univ.
- Polk, Nancy Edythe*, Asst. Dir., Sum. Sess. & Cont. Ed. Spec. B.A., Univ. of Mo. at Columbia; M.Ed., N.C. State Univ.
- Pollard, Carol W.*, Asst. Prof. of Engl. A.B., Radcliffe Coll.; M.A., Penn. State Univ.; Ph.D., Temple Univ.
- Pollock, Kenneth Hugh*, Assoc. Prof. of Stat., Biomath. & Zool. B.Sc., Univ. of Sydney (Australia); M.S., Ph.D., Cornell Univ.
- Pollock, Mary Ann*, Ext. Assoc. Prof. of Ext. Home Econ. B.S., M.S., Va. Polytech. Inst. & State Univ.; Ph.D., Univ. of Tenn. at Knoxville.
- Pond, Kevin Roy*, Asst. Prof. of Ani. Sci. B.S., Cornell Univ.; M.S., Ph.D., Texas A & M Univ.
- Pond, Samuel Barber, III*, Asst. Prof. of Psych. B.A., East Carolina Univ.; M.S., Ph.D., Auburn Univ.
- Pond, Susan Bittner*, Lect. in Engl. B.S., E. Carolina Univ.; M.A., Auburn Univ.
- Porter, Jean Marie*, Lib. & Head, Doc. Dept. B.S., M.S., Univ. of Wis. at Madison.
- Porter, Richard Lawrence*, Asst. Prof. of Mat. Sci. & Engr. B.S., M.Sc., Alfred Univ.; Ph.D., McMaster Univ. at Ontario.
- Posthill, John B.*, Res. Assoc. in Mat. Sci. & Engr. B.Sc., Univ. of Calif. at Berkeley; Ph.D., Univ. of Oxford (England).
- Postlethwait, Robert W.*, Adj. Prof. of Text. Engr. & Sci. B.S., West Va. Univ.; M.D., Duke Univ.
- Potterton, Marjorie M.*, Asst. Dir. of Fin. Aid. B.A., Ohio Wesleyan Univ.
- Poulton, Bruce Robert*, Chancellor of N.C. State Univ. & Prof. of Ani. Sci. B.S., M.S., Ph.D., Rutgers Univ.
- Powell, Dillard Martin*, Adj. Assoc. Prof. of Text. Mgmt. & Tech. B.S., N.C. State Univ.; M.B.A., J.D., Univ. of N.C. at Chapel Hill.
- Powell, Merle A., Jr.*, Ext. Prof. of Hort. Sci. and Ext. Spec.-In-Charge. B.A., Guilford Coll.; M.L.A., N.C. State Univ.
- Powell, Nathaniel Thomas*, Philip Morris Prof. of Plant Path. B.S., Va. Polytech. Inst. & State Univ.; M.Sc., Ph.D., N.C. State Univ.
- Powell, Roger Allen*, Assoc. Prof. of Zool. & For. B.A., Carlton Coll.; Ph.D., Univ. of Chicago.
- Pozo, Frank J.*, Lib. & Ref. Lib. B.A., Fordham Univ.; M.L.S., State Univ. of N.Y. at Geneseo.
- Prak, Anco Luning*, James T. Ryan Prof. of Ind. Engr. & In Charge of Furn. Manuf. & Mgmt. Curr. Technische Hogeschool (Delft, The Netherlands); Ph.D., N.C. State Univ.
- Preiss, Donald Merle*, Adj. Prof. of Chem. Engr. B.S., Willamette Univ.; M.S., Ph.D., Univ. of Del.
- Pressley, James Venoy, Jr.*, Assoc. Dir., Craft Cntr., Univ. Stud. Ctr. B.A., N.C. State Univ.
- Prichard, Virginia Meade*, Assoc. Prof. of For. Lang. & Lit. B.A., Coll. of Wm. & Mary; M.A., Duke Univ.
- Prioli, Carmine Andrew*, Assoc. Prof. of Engl. B.A., Suffolk Univ.; M.A., Boston Coll.; Ph.D., State Univ. of N.Y.
- Pritchard, Ruie Jane*, Asst. Prof. of Curr. & Instr. A.B., M.Ed., Ph.D., Univ. of Mo.
- Proctor, Charles Harry*, Prof. of Stat. B.A., M.A., Ph.D., Mich. State Univ.
- Proctor, Dalton Ray*, Prof. of 4-H & Youth Devel. & Adult & Comm. Coll. Ed. & Asst. Dir., Agri. Ext. Ser. B.S., M.Ed., N.C. State Univ.; Ed.D., Va. Polytech. Inst. & State Univ.
- Prossie, Everette Martin*, Dist. Ext. Dir. in Agri. Ext. Serv. B.S., Va. Polytech. Inst. & State Univ.; M.S., Va. State Coll.
- Przygocki, Gregory N.*, Assoc. Prof. of Design. B.I.D., Univ. of Manitoba; M.V.A., Univ. of Alberta.
- Purcell, Robert Lane*, Recruit. Coord., Athl. B.S., Univ. of N.C. at Chapel Hill; M.Ed., Univ. of Ga.
- Purrrington, Suzanne Townsend*, Assoc. Prof. of Chem. B.A., Wheaton Coll.; M.A., Radcliffe Coll.; Ph.D., Harvard Univ.
- Pursley, Walter A.*, Res. Asst. in Crop Sci. B.S., N.C. State Univ.
- Puryear, Bobby Lee*, Lect. in Econ. & Bus. B.A., M.S., N.C. State Univ.
- Puryear, Pamela E.*, Lib. & Dir., Tob. Lit. Serv. B.A., M.A., N.C. State Univ.; M.L.S., Univ. of N.C. at Chapel Hill.
- Putcha, Mohan S.*, Prof. of Math. B.A., Ph.D., Univ. of Calif. at Santa Barbara.
- Putnam, Zeph J.*, Assoc. Dir., Univ. Din. B.A., Mich. State Univ.
- Quesenberry, Charles Price*, Prof. of Stat. B.S., M.S., Ph.D., Va. Polytech. Inst. & State Univ.
- Radtke, Rosetta R.*, Lect. in Engl. B.A., Univ. of Ariz.; M.A., M.F.A., Univ. of Ark.
- Rahman, M. Shamimur*, Assoc. Prof. of Civ. Engr. B.S., Muzaffarpur Inst. of Tech. (India); M.Tech., Indian Inst. of Tech.; Ph.D., Univ. of Calif. at Berkeley.
- Rajala, Sarah A.*, Assoc. Prof. of Elect. & Comp. Engr. B.S., Mich. Tech. Univ.; M.S., Ph.D., Rice Univ.
- Rakes, Allen Huff*, Prof. of Ani. Sci. B.S., M.S., Va. Poly. Inst. & State Univ.; Ph.D., Cornell Univ.
- Ramakrishnan, Prabha Kuthur*, Res. Assoc. in Phys. B.Sc., M.Sc., Univ. of Madras (India); D.I.C., Imperial Coll. of Sci. & Tech. (London); Ph.D., N.C. State Univ.
- Raman, Sethu*, Prof. of Mar., Earth & Atmos Sci. B.S., Inst. of Engrs. (India); M.E., Univ. of Roorkee (India); Ph.D., Colo. St. Univ. at Ft. Collins.
- Ramsay, Robert Todd*, Asst. Prof. of Math. B.S., Univ. of Wash.; M.S., Ph.D., Univ. of Miami.
- Ramsey, Harold Arch*, Prof. of Ani. Sci. B.S., Kan. State Univ.; M.S., Ph.D., N.C. State Univ.
- Rand, James Patrick*, Assoc. Prof. of Arch. B.Arch., Va. Polytech. Inst. & State Univ.; M.Arch., Univ. of Ore.
- Rao, Dhanwada Madhava*, Adj. Assoc. Prof. of Mech. & Aero. Engr. B.S., Univ. of Allahabad; D.I.C., Imperial Coll.; Ph.D., Univ. of London.
- Raper, Charles David, Jr.*, Prof. of Soil Sci. B.S., M.S., N.C. State Univ.; Ph.D., Purdue Univ.
- Rasdorf, William John*, Asst. Prof. of Civ. Engr. & Comp. Sci. B.A.E., M.S., Penn. State Univ.; M.S., Ph.D., Carnegie-Mellon Univ.
- Rastgoufard, Parvis*, Lect. in Elect. & Comp. Engr. B.S., State Univ. of N.Y.; M.S., Ph.D., Mich. St. Univ.
- Raulston, James C.*, Prof. of Hort. Sci. & Land. Arch. B.S., Okla. State Univ.; M.S., Ph.D., Univ. of Md.
- Rawlings, John Oren*, Prof. of Stat. & Gen. B.S., M.S., Univ. of Neb.; Ph.D., N.C. State Univ.
- Raymond, Arthur Garfield, Jr.*, Adj. Asst. Prof. of Wood & Paper Sci. B.S., N.C. State Univ.
- Raymond, Dana Gordon*, Asst. Prof. of Design. B.F.A., Univ. of S. Maine; M.F.A., Queens Coll.
- Raynor, Charles Emory*, Lect. in Phys. Ed. B.S., M.Ed., Campbell Univ.
- Rea, Phillip Stanley*, Assoc. Prof. of Rec. Res. Adm. B.S., W. Liberty State Coll.; M.S., Univ. of N.Y. at Cortland; Re.D., Indiana Univ.
- Real, Leslie A.*, Assoc. Prof. of Zool. & Biomath. B.A., Indiana Univ.; M.S., Ph.D., Univ. of Mich.

- Redeker, Immo H.*, Dir. of Min. Res. Lab. B.S., Univ. for Mining & Metallurgy (Australia); M.S., Columbia Univ.
- Reed, Sandra M.*, Asst. Prof. of Crop Sci. B.S., Ph.D., Univ. of Ky.
- Regan, Thomas Howard*, Prof. of Phil. A.B., Thiel Coll.; M.A., Ph.D., Univ. of Va.
- Register, Carolyn Crouse*, Ext. Assoc. Prof. of Ext. Home Ec. & Dist. Ext. Prog. Leader, Home Ec. B.S., Univ. of N.C. at Greensboro; M.S., N.C. State Univ.
- Rehbock, James Martin*, Coord. of Athl. Train. B.A., Bridgewater Coll.; M.Ed., James Madison Univ.
- Reid, Elbert*, Asst. Prof. of Agri. Comm. B.S., M.A., La. State Univ.
- Reid, Paul Nelson*, Prof. of Soc. & Anth. & Dir. of Soc. Work Prog. B.A., M.S.W., Univ. of N.C. at Chapel Hill; Ph.D., Ohio State Univ.
- Reid, Rosalind*, Asst. Dir. in Infor. Serv. A.B., Syracuse Univ.; A.M., Duke Univ.
- Reid, Traciell Venise*, Asst. Prof. of Pol. Sci. & Pub. Adm. B.A., Emory Univ.; M.A., Ph.D., Univ. of Va.
- Reiland, Thomas*, Assoc. Prof. of Stat. & Oper. Res. B.A., Lewis Univ.; M.A., Bowling Green State Univ.; M.S., Ph.D., Fla. State Univ.
- Reiman, Evelyn M.*, Dir., Stud. Devel. B.A., Va. Polytech. Inst. & State Univ.; M.Ed., Univ. of Ga.
- Reinert, Richard Allyn*, Prof. (USDA) of Plant Path. B.S., Ph.D., Univ. of Wis.
- Reisman, Arnold*, Prof. of Elect. & Comp. Engr. B.S., City Coll. of N.Y.; M.S., Brooklyn Coll.; Ph.D., Polytechnic Inst. of N.Y.
- Reiter, Lawrence W.*, Adj. Assoc. Prof. of Zool. A.B., Rockhurst Coll.; Ph.D., Univ. of Kan. Med. Ctr.
- Retchin, Marcia Lynn*, Lect. in Engl. B.A., Duke Univ.; M.A., N.C. State Univ.
- Reuer, Gunther John Phillip*, Prof. of Arch. B.Arch., N.C. State Univ.; Ph.D., Freie Universitat (Berlin).
- Reusche, Gary A.*, Asst. Prof. of Crop Sci. B.S., M.S., Va. Polytech. Inst. & State Univ.; Ph.D., Miss. State Univ.
- Reynolds, Michael Shane*, Prof. of Engl. B.A., Rice Univ.; M.A., Univ. of N.C. at Chapel Hill; Ph.D., Duke Univ.
- Reynolds, Stephen P.*, Asst. Prof. of Phys. B.A., Harvard Univ.; M.A., Ph.D., Univ. of Calif. at Berkeley.
- Rhodes, Donald Robert*, Univ. Prof. of Elect. & Comp. Engr. B.E.E., M.Sc., Ph.D., Ohio State Univ.
- Rhodes, Max Steve*, Asst. Prof. of Phys. Ed. B.S., M.A., W. Carolina Coll.
- Rice, James A.*, Asst. Prof. of Zool. B.A., St. Louis Univ.; M.S., Ph.D., Univ. of Wis. at Madison.
- Rich, Nancy Bailey*, Asst. Prof. of Engl. A.B., M.A., Univ. of N.C. at Chapel Hill.
- Richard, Jamie B.*, Instr. in Text. Mgmt. & Tech. B.S., M.Tex., N.C. State Univ.
- Richardson, Daniel Craig*, Asst. Prof. of Comp. Ani. & Special Spec. Med. B.S., D.V.M., Kan. State Univ.
- Richardson, Frances Marian*, Assoc. Prof. of Engr. B.S., Roanoke Coll.; M.S., Univ. of Cincinnati.
- Richardson, John G.*, Dist. Prog. Ldr., Agri. Ext. Serv. Adm. B.S., M.Ed., N.C. State Univ.
- Richter, Carole Sue*, Res. Asst. in Microbid. & Asst. to the Coord. of the Elect. Micro. Ctr., B.S., Ohio State Univ.
- Riddle, John Marion*, Prof. of Hist. & Head, Div. of Univ. Studies. A.B., Lenoir Rhyne Coll.; M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Ridgeway, Don Lee*, Prof. of Stat. & Phys. B.S., Yale Univ.; Ph.D., Univ. of Rochester.
- Rifti, Fatih A.*, Asst. Prof. in Arch. B. Arch., Amer. Univ. of Beirut; M. Arch., Univ. of Ore.
- Riordan, Allen James*, Assoc. Prof. of Meteorol. B.S., M.S., Ph.D., Univ. of Wis.
- Risley, John Stetler*, Prof. of Phys. B.S., M.S., Ph.D., Univ. of Wash.
- Risman, Barbara J.*, Asst. Prof. of Soc. & Anth. B.A., Northwestern Univ.; M.A., Ph.D., Univ. of Wash.
- Ritchie, David Frey*, Assoc. Prof. of Plant Path. B.A., Goshen Coll.; M.S., Ph.D., Mich. State Univ.
- Rittenhouse, David L.*, Asst. Dir., Univ. Stud. Ctr. B.G.S., Univ. of Neb.; M.A., Webster Coll.
- Ritter, Timothy W.*, Adj. Inst. of Microbid. Path. and Parasit., B.A., St. Andrews Coll.; B.S., N.C. State Univ.
- Riviere, Jim Edmond*, Assoc. Prof. of Anat., Physiol. Sci. & Radiol. B.S., M.S., Boston Coll.; D.V.M., Ph.D., Purdue Univ.
- Rizk, Victor F.*, Staff Phys. M.D., Cairo Univ.
- Robarge, Wayne Philip*, Sr. Res. in Soil Sci. B.S., M.S., Cornell Univ.; Ph.D., Univ. of Wis. at Madison.
- Robbins, Woodrow Ernest*, Assoc. Prof. of Comp. Sci. B.S., Salisbury State Coll.; M.S. (Gen. Sci.), M.S. (Math.), Ph.D., Syracuse Univ.
- Roberson, Gary Thomas*, Instr. in Biol. & Agri. Engr. B.S., M.S., N.C. State Univ.
- Roberts, Donald Rowland*, Dir., Int'l Stud. Off. B.A., Baylor Univ.; M.A., Univ. of Conn.
- Roberts, John Frederick*, Prof. of Zool. B.S., Ph.D., Univ. of Ariz.
- Roberts, Julia T.*, Area Dir., Res. Life. B.A., Clemson Univ.; M.A., Appalachian State Univ.
- Roberts, Malcolm C.*, Prof. of Food Ani. & Equine Med. B.V.Sc., Univ. of Liverpool; Ph.D., Univ. of Bristol.
- Roberts, Steven M.*, Asst. Prof. of Comp. Ani. & Special Spec. Med. B.S., M.S., D.V.M., Colo. St. Univ.
- Roberts, Thomas C.*, Lect. in Phys. Ed. B.A., M.A., Univ. of N.C. at Chapel Hill.
- Robertson, Steven W.*, Asst. Football Coach. B.S., Newberry Coll.
- Robinette, Chester Lee, Jr.*, Asst. Prof. of Anat., Physiol. Sci. & Radiol. B.S., Ph.D., W. Va. Univ.; D.V.M., Univ. of Ill.
- Robinson, Mendel Leno, Jr.*, Assoc. Prof. & Asst. Head of Text. Mgmt. & Tech. B.S., M.S., Ed.D., N.C. State Univ.
- Robinson, Robert Alan*, Asst. Athl. Dir. B.S., E. Carolina Univ.; M.Ed., N.C. State Univ.
- Robison, Odie Wayne*, Prof. of Ani. Sci. & Gen. B.S., Okla. A & M Coll.; M.S., Ph.D., Univ. of Wis.
- Robl, Hermann Rudolf*, Adj. Prof. of Elect. & Comp. Engr. Ph.D., Teach. Univ. Vienna, Austria.
- Rock, George Calvert*, Prof. of Entom. B.S., Bob Jones Univ.; M.S., Va. Polytech. Inst. & State Univ.; Ph.D., Cornell Univ.
- Rockness, Joanne W.*, Assoc. Prof. of Econ. & Bus. B.S., M.B.A., M.A., West. Mich. Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- Roddy, Christopher James*, Teaching Tech. in Phys. B.S., Univ. of N.C. at Wilmington.
- Rodgers, Jerry G.*, Media Editor in Agri. Comm. B.S., Ark. State Univ.; M.A., Univ. of Mo.
- Rodgers, Raymond S.*, Assoc. Prof. & Asst. Head of Speech-Comm. B.A., Northwestern State Univ. of La.; M.A., Univ. of Ark.; Ph.D., Univ. of Okla.
- Rodman, Robert D.*, Assoc. Prof. of Comp. Sci. & Ind. Engr. B.A., M.A. (Math.), M.A. (Ling.), Ph.D., Univ. of Calif. at L.A.
- Rodriguez, Jesus*, Assoc. Prof. of Math. B.S., Univ. of Puerto Rico; M.A., Ph.D., Univ. of Md.
- Roe, Richard Michael*, Asst. Prof. of Entom. B.S., M.S., Ph.D., La. State Univ.
- Rogers, Brenda H.*, Asst. Dir., Inst. Res. B.A., Univ. of N.C. at Chapel Hill; M.Ed., Ph.D., N.C. State Univ.
- Rogers, Henry J.*, Instr. of Mil. Sci. B.A., Va. Military Inst., M.S., Troy State Univ.
- Rogers, Richard Alan*, Lab. Supervisor, Anat., Physiol. Sci. & Radiol. B.S., Clemson Univ.; M.S., N.C. State Univ.
- Rogers, Spencer McMath, Jr.*, Sr. Engr. Ext. Spec., N.C. Sea Grant Prog. & Civ. Engr. B.S., Univ. of Va.; M.S., Univ. of Fla.

- Rohrbach, June E.*, Lect. in Math. B.S., Kutztown St. Coll.; M.Ed., N.C. State Univ.
- Rohrbach, Roger P.*, Prof. of Biol. & Agri. Engr. B.Agr. Engr., Ph.D., Ohio State Univ.
- Roise, Joseph Peter*, Asst. Prof. of For. & Wood & Paper Sci. B.S., S. Conn. St. Coll.; M.S., Colo. St. Univ.; Ph.D., Univ. of Wash.
- Rollins, Ernest William, Jr.*, Assoc. Prof. of For. Lang. & Lit. B.A., Wake Forest Univ.; M.A., Indiana Univ.; Ph.D., Vanderbilt Univ.
- Rollins, Yvonne B.*, Assoc. Prof. of For. Lang. & Lit. License, Univ. de Clermont-Ferrand (France); M.A., Brigham Young Univ.; Ph.D., Duke Univ.
- Root, Robert Thomas*, Lect. in Engl. B.S., Mansfield St.; M.A., N.C. State Univ.
- Rosch, Joel Burt*, Asst. Prof. of Pol. Sci. & Pub. Adm. B.A., Hobart Coll.; Ph.D., Univ. of Wash.
- Rose, Anita R.*, Coord., Coop. Ed. Prog. B.A., Concord Coll.; M.Ed., N.C. State Univ.
- Rose, Nicholas John*, Prof. of Math. M.E., Stevens Inst.; M.S., Ph.D., N.Y. Univ.
- Ross, William Alexander*, Lect. in Occup. Ed. B.S., M.Ed., N.C. State Univ.
- Rossana, Robert J.*, Assoc. Prof. of Econ. & Bus. B.A., St. Joseph's Univ.; M.A., Univ. of Del.; Ph.D., Johns Hopkins Univ.
- Rosser, Lou W.*, Lect. in Engl. B.A., Univ. of N.C. at Greensboro; M.A., N.C. State Univ.
- Rothwarf, Frederick*, Adj. Prof. of Mat. Sci. & Engr. A.B., A.M., Ph.D., Temple Univ.
- Routbort, Jules L.*, Adj. Prof. of Mat. Sci. & Engr. B.S., Univ. of Calif. at Berkeley; Ph.D., Cornell Univ.
- Rovner, Irwin*, Assoc. Prof. of Soc. & Anth. B.A., Brandeis Univ.; M.A., Ph.D., Univ. of Wis.
- Rowland, Sharon R.*, Ext. 4-H & Youth Spec. B.S., Univ. of N.C. at Greensboro; M.Ed., N.C. State Univ.
- Royster, Larry Herbert*, Prof. of Mech. & Aero. Engr. B.S., Ph.D., N.C. State Univ.
- Rozgonyi, George A.*, Prof. of Microelect. B.S., M.S., Notre Dame Univ.; Ph.D., Univ. of Ariz.
- Rubin, Albert Robert*, Asst. Prof. in Biol. & Agri. Engr. B.A., Univ. of Calif. at Irvine; M.A., Ed.D., N.C. State Univ.
- Rubin, Eva Redfield*, Assoc. Prof. of Pol. Sci. & Pub. Adm. B.A., Goucher Coll.; M.A., Wayne State Univ.; Ph.D., Johns Hopkins Univ.
- Ruchte, Willard Donald*, Adj. Lect. in Comp. Sci. B.S., N.C. State Univ.
- Rucker, James Warren*, Asst. Prof. of Text. Chem. B.S., M.S., Ph.D., N.C. State Univ.
- Rucker, Randal R.*, Asst. Prof. of Econ. & Bus. B.S., M.S., Mont. State Univ.; Ph.D., Univ. of Wash.
- Rudner, Lawrence Sheldon*, Assoc. Prof. of Engl. B.A., M.A. (Am. Hist. & Lit.), M.A. (Journalism), Ph.D., Mich. State Univ.
- Ruffy, Rebecca C.*, Asst. Prof. of Crop Sci. & Bot. B.A., Rutgers Univ.; M.S., Ph.D., N.C. State Univ.
- Ruffy, Thomas Wilson*, Asst. Prof. (USDA) of Crop Sci. & Bot. B.S., Univ. of N.C. at Chapel Hill; B.S., Rutgers Univ.; M.S., Ph.D., N.C. State Univ.
- Ruggles, Gary A.*, Asst. Prof. of Elect. & Comp. Engr. B.S., M.S., Ph.D., Penn. State Univ.
- Rutz, Michael Joseph*, Adj. Assoc. Prof. of Mech. & Aero. Engr. B.S., St. Joseph's Coll.; M.S., Ph.D., Univ. of Md.
- Rulla, James L.*, Asst. Prof. of Math. B.S., Southwestern Univ.; Ph.D., Univ. of Tex. at Austin
- Ruppel, Richard Jeffrey*, Lect. in Engl. A.B., Univ. of Mich.; M.A., Duke Univ.
- Rushing, John E.*, Asst. Prof. of Food Sci. B.S., M.S., Texas A&M Univ.; Ph.D., Univ. of Nebraska at Lincoln
- Russ, John C.*, Res. Assoc. in Engr. Res. Serv. Div. B.S., M.S., Calif. Inst. of Tech.
- Russell, Burton Lester*, Assoc. Prof. of Speech-Comm. B.A., Univ. of N. Iowa; M.A., Univ. of Iowa; Ph.D., Ohio State Univ.
- Russell, Phillip E.*, Assoc. Prof. of Mat. Sci. & Engr. B.S., Appalachian State Univ.; M.S., W. Va. Univ.; Ph.D., Univ. of Fla.
- Russell, Thomas Lee*, Instr. Tech. in Text. Ext. & Cont. Ed. B.S., State Univ. of N.Y.; M.S., Indiana Univ.
- Rust, Jon Paul*, Instr. in Text. Engr. & Sci. B.S.M.E., M.S., Clemson Univ.
- Rust, Richard R.*, Asst. Prof. of Civ. Engr. B.S., USMA, West Point; M.Eng., Ph.D., Tex. A & M Univ.
- Ruth, Bobby Glen*, Lect. in Engl. B.A., N.C. State Univ.
- Ryan, Terrell B.*, Adj. Assoc. Prof. of Micro., Path. & Parasit. D.V.M., A & M College of Tex.
- Sachs, Ekkehard Wolfgang*, Assoc. Prof. of Math. B.S., Universität Frankfurt; Diploma in Math., Technische Hochschule (Aachen); Doc. Deg., Technische Hochschule (Darmstadt).
- Sack, Ronald Herbert*, Prof. of Hist. B.A., Wis. State Univ.; M.A., Ph.D., Univ. of Minn.
- Safley, Charles D.*, Assoc. Prof. of Econ. & Bus. B.S., M.S., Univ. of Tenn.; Ph.D., Okla. State Univ.
- Safley, Lawson M., Jr.*, Assoc. Prof. of Biol. & Agri. Engr. B.S., Univ. of Tenn.; M.S., Ph.D., Cornell Univ.
- Safriet, Kathy H.*, Dir. of UNC Sea Grant Comm. B.A., Univ. of N.C. at Chapel Hill.
- Sagan, Hans*, Prof. of Math. Ph.D., Univ. of Vienna (Austria).
- Saibel, Edward Aaron*, Adj. Prof. of Mech. & Aero. Engr. B.S., Ph.D., Mass. Inst. of Tech.
- Salter, Samuel L., Jr.*, Dir. of Couns., Div. of Stud. Aff. A.B., Duke Univ.; M.S., Ph.D., N.C. State Univ.
- Sampson, Herman A.*, Lect. in Econ. & Bus. B.S., M.S., N.C. State Univ.
- Sanchez, Pedro*, Prof. of Soil Sci. B.S., M.S., Ph.D., Cornell Univ.
- Sanchez, Wendy Levin*, Res. Assoc., Curr. & Instr. B.S., Cornell Univ.; M.Ed., N.C. State Univ.
- Sanders, Douglas Charles*, Prof. of Hort. Sci. B.S., Mich. State Univ.; M.S., Ph.D., Univ. of Minn.
- Sanders, Linda W.*, Asst. Prof. & Asst. Head of Arch. B.Arch., M.Arch., Univ. of Fla.
- Sanford, Robert L. Jr.*, Res. Assoc. in For. B.S., Univ. of Mich.; M.S., Ph.D., Univ. of Calif. at Berkeley.
- Sanii, Ezat T.*, Asst. Prof. of Ind. Engr. B.S.I.E., Arya-Mehr Univ. of Tech. (Iran); M.S.I.E., Ph.D., Purdue Univ.
- San Julian, Gary J.*, Assoc. Prof. of Zool. B.S., W. Va. Univ.; M.S., Clemson Univ.; Ph.D., Colo. State Univ.
- Sankar, Sabapathy S.*, Res. Assoc., Text. Chem. B.Sc., Madurai Univ., (India); M.S., W. Carolina Univ., Ph.D., Univ. of Ga.
- Sanoff, Henry*, Prof. of Arch. B.Arch., M.Arch., Pratt Inst.
- Sargent, Frank Dorrance*, Prof. of Ani. Sci. B.S., Univ. of N. Hamp.; M.S., Ph.D., N.C. State Univ.
- Sasser, Carroll M., Jr.*, Res. in Crop Sci. B.S., Tusculum Coll.; M.S., Univ. of Tenn.
- Sasser, Preston Eugene*, Adj. Assoc. Prof. of Text. Engr. & Sci. B.S., M.S., Ph.D., N.C. State Univ.
- Savage, Carla D.*, Assoc. Prof. of Comp. Sci. B.S., Case West. Reserve Univ.; M.S., Ph.D., Univ. of Ill.
- Savage, Robert Garner*, Assoc. Prof. of Math. & Dir. of A.V., Lab., B.S., M.S., N.C. State Univ.
- Sawhney, Man Mohan*, Prof. of Soc. & Anth. & Assoc. Dean, Sch. of Hum. & Soc. Sci. B.Sc., Central Coll. of Agri., Univ. of Delhi (India); Ph.D., Post-Grad. School, New Delhi (India).
- Sawyer, Richard Leander*, Adj. Prof. of Hort. Sci. B.S., Univ. of Maine; Ph.D., Cornell Univ.
- Saze, Raymond Frederick*, Prof. of Nucl. Engr. B.Sc., Univ. of London; Ph.D., Univ. of Liverpool.

- Sazena, Vinod K.*, Assoc. Prof. of Meteor. B.S., M.S., Agra Univ.; Ph.D., Univ. of Rajasthan.
- Sayers, Dale Edward*, Prof. of Phys. B.A., Univ. of Calif. at Berkeley; M.S., Ph.D., Univ. of Wash.
- Saylor, LeRoy Charles*, Assoc. Dean, For. Res. & Asst. Dir., Res., Agri. & Life Sci. & Prof., For. & Gen. B.S., Iowa State Coll.; M.S., Ph.D., N.C. State Univ.
- Scandalios, John G.*, Distinguished Univ. Prof. of Gen. B.A., Univ. of Va.; M.S., Adelphi Univ.; Ph.D., Univ. of Hawaii.
- Scattergood, Ronald O.*, Prof. of Mat. Sci. & Engr. B.S., Lehigh Univ.; M.S., Sc.D., Mass. Inst. of Tech.
- Schaffer, Henry Elkin*, Prof. of Gen. & Asst. Prov. for Acad. Comp. B.S., Cornell Univ.; M.S., Ph.D., N.C. State Univ.
- Schechter, Stephen*, Assoc. Prof. of Math. B.A., Antioch Coll.; M.A., Ph.D., Univ. of Calif. at Berkeley.
- Scheideeler, Sheila E.*, Asst. Prof. of Poul. Sci. B.S., M.S., Univ. of Neb.; Ph.D., Iowa State Univ.
- Scheidt, Vicki Jo*, Asst. Prof. of Comp. Ani. & Special Spec. Med. B.A., Wash. Univ.; D.V.M., Univ. of Mo. at Columbia.
- Schetzina, Jan Frederick*, Prof. of Phys. B.S., Gannon Coll.; M.S., Ph.D., Penn. State Univ.
- Schiermeier, Marilyn G.*, Lect. in Math. A.B., Webster Univ.; M.Ed. N.C. State Univ.
- Schindler, Anton*, Adj. Prof. of Text. Chem. Ph.D., Univ. of Vienna (Austria).
- Schlachter, Alfred Simon*, Adj. Assoc. Prof. of Phys. A.B., Univ. of Calif. at Berkeley; M.A., Ph.D., Univ. of Wis. at Madison.
- Schlanz, John William*, Min. Dressing Engr. B.S., W. Va. Univ.
- Schmitt, Donald P.*, Assoc. Prof. of Plant Path. B.S., M.S., Ph.D., Iowa State Univ.
- Schmittle, Samuel C.*, Adj. Assoc. Prof. of Food Ani. & Equine Med. D.V.M., Ohio State Univ.; M.S., Ph.D., Univ. of Ill. at Urbana.
- Schneeweis, Thomas John*, Res. Asst. in Microbiol. B.S., Univ. of Wis.; M.S., South Dakota State Univ.
- Schneider, Sally M.*, Asst. Prof. (USDA) of Plant Path. & Crop Sci. B.S., Ph.D., Univ. of Calif. at Riverside.
- Schoenherr, William D.*, Instr. of Ani. Sci. B.S., Wheaton Coll.; M.S., Kan. State Univ.
- Schrag, Robert Lawrence*, Assoc. Prof. of Speech-Comm. B.A., Kalamazoo Coll.; M.A., W. Mich. Univ.; Ph.D., Wayne State Univ.
- Schreiner, Anton Franz*, Prof. of Chem. B.S., M.S., Univ. of Detroit; Ph.D., Univ. of Ill.
- Schrimer, Ronald Arthur*, Prof. of Econ. B.S., M.S., Penn. State Univ.; Ph.D., N.C. State Univ.
- Schroeder, Carol G.*, Counselor & Asst. Dir., Career Plan. & Placemt. B.A., Duke Univ.; M.A., N.C. State Univ.
- Schroeder, James G.*, Adj. Assoc. Prof. of Wood & Paper Sci. B.S.F., Colo. State Univ.; M.F., Duke Univ.
- Schulman, Michael D.*, Assoc. Prof. of Soc. & Anth. B.A., Pomona Coll.; M.S., Ph.D., Univ. of Wis. at Madison.
- Schultz, Arturo E.*, Asst. Prof. of Civil Engr. B.S., Southern Methodist Univ.; M.S., Ph.D., Univ. of Ill. at Urbana.
- Schur, Dennis A.*, Adj. Lect. of Comp. Sci. B.E., Youngstown Univ.; M.B.A., Xavier Univ.
- Schwartz, Steven J.*, Asst. Prof. of Food Sci. B.S., State Univ. of N.Y. at Stony Brook; M.S., Ph.D., Univ. of Wis. at Madison.
- Schweitz, Bernard A.*, Adj. Prof. of Anat., Physiol. Sci. & Radiol. B.S., Univ. of Wis. at Madison; D.V.M., Univ. of Minn.; Ph.D., Univ. of Iowa.
- Scott-Jones, Diane*, Asst. Prof. of Psych. B.S., M.S., Appalachian State Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- Scott, Robert W.*, Adj. Prof. of Adult & Comm. Coll. Ed. B.S., N.C. State Univ.
- Scott, Roderick Keith*, Adj. Asst. Prof. of Comp. Sci. B.A., Univ. of N.C. at Chapel Hill; M.S.E., N.C. A&T State Univ.; Ph.D., N.C. State Univ.
- Seagondollar, Lewis Worth*, Prof. of Phys. A.B., Emporia State Teachers Coll.; Ph.M., Ph.D., Univ. of Wis.
- Seaman, Paul Edmond*, Sports Info. Dir. A.B., Furman Univ.
- Seastrunk, Cliff L.*, Ext. Spec. in Text. Ext. B.S., N.C. State Univ.
- Seater, John J.*, Prof. of Econ. & Bus. A.B., Sc.M., Ph.D., Brown Univ.
- Secrest, Elliott Russell*, Adj. Lect. in Comp. Sci. B.S., N.C. State Univ.
- Segerson, Edward C.*, Adj. Assoc. Prof. of Ani. Sci. B.S., M.S., Memphis State Univ.; Ph.D., N.C. State Univ.
- Seitz, Morena H.*, Res. Assoc. in Crop Sci. B.A., State Univ. of N.Y.; M.S., Ph.D., Univ. of Ariz.
- Seitz, Robert A.*, Sr. Min. Engr., Min. Res. Lab. B.S., M.S., Mich. Tech. Univ.
- Selgrade, James Francis*, Assoc. Prof. of Math. B.A., Boston Coll.; M.A., Ph.D., Univ. of Wis.
- Seltmann, Heinz*, Prof. (USDA) of Bot. & Crop Sci. B.A., Drew Univ.; M.S., Ph.D., Univ. of Chicago.
- Seneca, Ernest Davis*, Head, Botany & Prof., Botany & Soil Sci. B.S., M.S., Va. Polytech. Inst. & State Univ.; Ph.D., N.C. State Univ.
- Serow, Robert C.*, Assoc. Prof. of Ed. Ldrshp. & Prog. Eval. B.A., Fordham Univ.; M.A., Ph.D., Cornell Univ.
- Setzer, C. John*, Assoc. Prof. & Assoc. Dept. Head of Chem. Engr. B.Ch.E., M.S., Ph.D., Ohio State Univ.
- Setzer, Sharon M.*, Lect. in Engl. B.A., Meredith Coll.; M.A., N.C. State Univ.; Ph.D., Duke Univ.
- Seymour, Sydney K.*, Adj. Asst. Prof. in Biol. & Agri. Engr. B.S., M.S., Ph.D., N.C. State Univ.
- Shafer, Steven Ray*, Asst. Prof. (USDA) of Plant Path. & Soil Sci. B.S., M.S., Ohio State Univ.; Ph.D., N.C. State Univ.
- Shaffran, Anne Katherine*, Lect. in Engl. B.A., M.A., Va. Polytech. Inst. & State Univ.
- Shannon, Jack Lynn*, Assoc. Prof. of Phys. Ed. & Facilities Coor. B.S., M.S., W. Va. Univ.
- Shaw, Graye Johnson*, Lab. Supervisor in Chem. B.S., M.S., N.C. State Univ.
- Shearer, Michael*, Assoc. Prof. of Math. B.A., York Univ. (England); M.Sc., Wadham Coll. & Math. Inst. (England); Ph.D., Oxford Univ.
- Shearon, Ronald Wilson*, Prof. & Assoc. Head of Adult & Comm. Coll. Ed. B.S., M.S., Ed.D., N.C. State Univ.
- Sheets, Thomas Jackson*, Prof. of Entom., Crop Sci., & Hort. Sci. & Dir., Pest. Residue Res. Lab. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of Calif. at Davis.
- Sheldon, Brian W.*, Assoc. Prof. of Food Sci. & Poultry Sci. B.S., Univ. of Dubuque; M.S., N. Mex. Highlands Univ.; Ph.D., Va. Polytech. Inst. & State Univ.
- Shell, Dora M.*, Cont. Ed. Spec. B.A., Meredith Coll.; M.Ed., N.C. State Univ.
- Shelley, Rowland McLamb*, Adj. Assoc. Prof. of Zool. A.B., Univ. of N.C. at Chapel Hill; Ph.D., N.C. State Univ.
- Shelton, James Edward*, Assoc. Prof. of Soil Sci. B.S., M.S., Univ. of Ky.; Ph.D., N.C. State Univ.
- Sheridan, Richard B.*, Head Football Coach. B.S., M.A., Univ. of S.C.
- Shew, Howard David*, Asst. Prof. of Plant Path. B.S., Greensboro Coll.; M.S., Ph.D., N.C. State Univ.
- Shih, Jason C. H.*, Assoc. Prof. of Poul. Sci. B.S., M.S., Nat'l Taiwan Univ.; Ph.D., Cornell Univ.
- Shimura, Fumio*, Adj. Assoc. Prof. of Mat. Sci. & Engr. B.S., M.S., Nagoya Inst. of Tech.; Ph.D., Nagoya Univ.
- Shoemaker, Paul Beck*, Prof. of Plant Path. B.S., M.S., Rutgers Univ.; Ph.D., Cornell Univ.
- Shogren, Vernon Frederick*, Prof. of Arch. B.Arch., Univ. of Minn.; M.Arch., Mass. Inst. of Tech.

- Short, Douglas Dean*, Adj. Prof. of Engl. B.A., Stetson Univ.; M.A., Ph.D., Duke Univ.
- Showers, William J.*, Asst. Prof. of Mar., Earth & Atmos. Sci. B.A., Univ. of Calif. at Santa Barbara; M.S., Univ. of Calif. at Davis; Ph.D., Univ. of Hawaii at Manoa.
- Shuman, Ruth M.*, Asst. Prof. of Poul. Sci. B.S., M.S., Ph.D., Univ. of Minn. at St. Paul.
- Siderelis, Chrystos Dmitry*, Prof. of Rec. Res. Adm. B.S., Ariz. State Univ.; M.A., Ph.D., Univ. of N. Mex.
- Siewert, Charles Edward*, Prof. of Nucl. Engr. & Math. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of Mich.
- Sigvaldsen, Jean Tilden*, Lab. Supervisor, Chem. B.A., M.S., N.C. State Univ.
- Sigmon, Tony Wayne*, Adj. Asst. Prof. of Mech. & Aero. Engr. B.S., M.S., Ph.D., N.C. State Univ.
- Sikes, Mary Williamson*, Lect. in Math. B.A., Coker Coll.; M.S., N.C. State Univ.
- Silber, Robert*, Assoc. Prof. of Math. B.A., Vanderbilt Univ.; M.A., Univ. of Ala.; Ph.D., Clemson Univ.
- Siliski, Vickie F.*, Asst. Dir., Univ. Dining. B.S., Univ. of Tenn.
- Silverberg, Lawrence M.*, Asst. Prof. of Mech. & Aero. Engr. B.S., M.S., Ph.D., Va. Polytech. Inst. & State Univ.
- Silverstein, Jack William*, Assoc. Prof. of Math. B.A., Hofstra Univ.; M.S., Ph.D., Brown Univ.
- Simmons, Donald G.*, Prof. of Microbiol., Path. & Parasit. B.A., Bridgewater College; M.S., D.V.M., Ph.D., Univ. of Ga.
- Simonsen, Sofus Emmelov*, Assoc. Prof. of For. Lang. & Lit. Teach. Cert., Teachers Coll. of Arhus (Denmark); B.S., Univ. of Arhus (Denmark); M.A., Univ. of N.C. at Chapel Hill; Ph.D., Univ. of Cinn.
- Simpson, Billy G.*, Sr. Engr. Ext. Spec., Ind. Ext. Serv. B.S., Mich. State Univ.
- Simpson, Cleveland*, Prof., Aero. St. B.S., N.C. A&T State Univ.; M.S., Univ. of S. Calif.
- Simpson, Melvin Ronald*, Lib. & Head of Tech. Info. Ctr. B.A., M.S., Univ. of N.C. at Chapel Hill.
- Simpson, William Hughes*, Secretary of the University. B.S., Wake Forest Univ.; M.A., Columbia Univ.
- Sims, Leslie Berl*, Assoc. Dean for Res., Sch. of PAMS & Prof. of Chem. B.A., South. Ill. Univ.; M.S., Ph.D., Univ. of Ill. at Urbana.
- Singer, Michael F.*, Prof. of Math. B.A., N. Y. Univ.; M.A., Ph.D., Univ. of Calif. at Berkeley.
- Singh, Harmohindar*, Adj. Assoc. Prof. of Mech. & Aero. Engr. B.Sc., M.Sc., P.E. College (Chandigarh, India); M.S., Ph.D., Wayne State Univ.
- Singh, Phirtu*, Lab. Supervisor & Dir., X-Ray Crystal. Lab., Chem. B.Sc., Banaras Univ. (India); M.Sc., Agra Univ. (India); M.S., Colo. State Univ.; Ph.D., Univ. of Colo.
- Singh, Rudra Pratap*, Adj. Prof. of Wood & Paper Sci. B.Sc., M.Sc., Banaras Hindu Univ.; Ph.D., Univ. of Adelaide.
- Singletary, William Currie, Jr.*, Adj. Instr. in Rec. Res. Adm. A.B., Univ. of N.C. at Chapel Hill; M.S., Univ. of Ill. at Urbana.
- Singleton, Robert E.*, Adj. Assoc. Prof. of Mech. & Aero. Engr. B.S., N.C. State Univ.; M.S., Ph.D., Calif. Inst. of Tech.
- Siopes, Thomas D.*, Assoc. Prof. of Poul. Sci. B.A., Calif. State Univ.; M.S., Ph.D., Univ. of Calif. at Davis.
- Sisco, Paul Hardeman, Jr.*, Asst. Prof. of Crop Sci. B.A., Princeton Univ.; M.A., Columbia Univ.; Ph.D., Cornell Univ.
- Sisler, Edward Carroll*, Prof. of Bot. & Biochem. B.S., M.S., Univ. of Md.; Ph.D., N.C. State Univ.
- Sisson, Verne A.*, Asst. Prof. (USDA) of Crop Sci. B.S., Univ. of Ill.; M.S., Ph.D., N.C. State Univ.
- Skaggs, Richard W.*, Wm. Neal Reynolds Prof. of Biol. & Agri. Engr. & Soil Sci. B.S., M.S., Univ. of Ky.; Ph.D., Purdue Univ.
- Skender, Charles J.*, Lect. in Econ. & Bus. B.S., Lehigh Univ.
- Skroch, Walter Arthur*, Prof. of Hort. Sci. B.S.Ed., River Falls State Coll.; M.S., Ph.D., Univ. of Wis.
- Slatta, Richard Wayne*, Assoc. Prof. of Hist. B.A., Pacific Lutheran Univ.; M.A., Portland State Univ.; Ph.D., Univ. of Tex. at Austin.
- Smallwood, James Edgar*, Prof. of Anat., Physiol. Sci. & Radiol. B.S., M.S., D.V.M., Texas A. & M. Univ.
- Smart, Robert C.*, Asst. Prof. of Entom. B.S., Southeast. Mass. Univ.; Ph.D., Univ. of Mich.
- Smetana, Frederick Otto*, Prof. of Mech. Engr. B.M.E., M.S.M.E., N.C. State Univ.; Ph.D., Univ. of S. Calif.
- Smith, Andrew W.*, Asst. Coord./Frat. & Sor. B.A., N.C. State Univ.
- Smith, Carl Brent*, Assoc. Prof. of Text. Chem. B.S., N.C. State Univ.; Ph.D., Univ. of Fla.
- Smith, Charles Eugene*, Asst. Prof. of Stat. B.S., Mass. Inst. of Tech.; M.S., Ph.D., Univ. of Chicago.
- Smith, Clarence L., Jr.*, Lect. & Asst. Dept. Head in Ind. Engr. B.S., N.C. State Univ.
- Smith, Donald E.*, Prof. of Zool. B.S., Bloomsburg State Coll.; M.S., Ph.D., Ohio State Univ.
- Smith, Emelyn Virginia*, Lect. in Phys. Ed. B.S., Atlantic Christ. Coll.; M.A., West. Carolina Univ.
- Smith, Frank James*, Assoc. Prof. of Psych. B.S., M.S., Iowa State Univ.; Ph.D., Mich. State Univ.
- Smith, Gary William*, Asst. Prof. of Text. Mgmt. & Tech. B.S., M.T.T., N.C. State Univ.; Ph.D., Leeds Univ.
- Smith, Gilbert Graves*, Prof. of For. Lang. & Lit. B.A., Baylor Univ.; M.A., Tulane Univ.; Ph.D., Brown Univ.
- Smith, Henry Donnell*, Adj. Asst. Prof. of For. B.S., Ph.D., N.C. State Univ.
- Smith, J. C.*, Assoc. Prof. of Civ. Engr. B.C.E., M.S., N.C. State Univ.; Ph.D., Purdue Univ.
- Smith, John David*, Asst. Prof. of Hist. A.B., Baldwin-Wallace Coll.; A.M., Ph.D., Univ. of Ky.
- Smith, Lathan F., Jr.*, Ext. Assoc. Prof. 4-H & Youth Devel. & Asst. State Prog. Ld. B.S., M.A., N.C. State Univ.
- Smith, Lee*, Assoc. Prof. of Engl. B.A., Hollins Coll.
- Smith, Linda A.*, Asst. Prof. of Soc. & Anth. B.A., City Coll. of N.Y.; M.S.W., Boston Univ.
- Smith, Luther A.*, Res. Assoc. in For. B.A., Vanderbilt Univ.; M.S., Ph.D., N.C. State Univ.
- Smith, Mark D.*, Res. Asst., For. B.S., N.C. State Univ.
- Smith, Nathaniel Waite, III*, Res. Asst. & Teach. Tech. in Zool. B.A., Univ. of R.I.
- Smith, Neal Frederick*, Instr. in Naval Sci. B.S., N.C. State Univ.
- Smith, Norwood Graham*, Assoc. Prof. of Engl. A.B., M.A., Duke Univ.
- Smith, Rex R.*, Lect. in Phys. Ed. B.S., N.C. A & T State Univ.; M.S., N.C. Central Univ.
- Smith, William Adams, Jr.*, Prof. of Ind. Engr. & Coord. of Adv. Prog. Dev. B.S., U.S. Naval Acad.; M.S., Lehigh Univ.; D. Engr. Sc., N. Y. Univ.
- Smith, William David*, Asst. Prof. of Crop Sci. B.S., M.S., Univ. of Fla.; Ph.D., N.C. State Univ.
- Smith, William Dwight*, Lect. in For. B.S., M.S., N.C. State Univ.
- Smoot, Amelia Jean Johannessen*, Prof. of Engl. B.A., Eckerd Coll.; Ph.D., Univ. of N.C. at Chapel Hill.
- Smyth, Thomas Jot*, Asst. Prof. of Soil Sci. B.S., Texas Tech. Univ.; M.S., Ph.D., N.C. State Univ.
- Sneed, Ronald Ernest*, Ext. Prof. of Biol. & Agri. Engr. B.S., Ph.D., N.C. State Univ.
- Snipes, Jeffery Windell*, Asst. Football Coach B.A., Furman Univ.
- Snow, Nancy Hill*, Asst. Prof. of Speech-Comm. B.A., Univ. of N.C. at Greensboro; M.A., Northwestern Univ.
- Snyder, Samuel S., Jr.*, Assoc. Prof. of Psych. A.B., Dartmouth Coll.; M.S., Ph.D., Yale Univ.

- Snyder, Wesley E.*, Assoc. Prof. of Elect. & Comp. Engr. B.S.E.E., N.C. State Univ.; M.S.E.E., Ph.D., Univ. of Ill. at Urbana.
- Snyder, William H.*, Adj. Prof. of Meteor. B.S., M.S., Ph.D., Penn. State Univ.
- Soderstrum, John Preston*, Res. Assoc. in Phys. B.A., Carleton Coll.; Ph.D., Univ. of Wis. at Madison.
- Soloman, Barbara A.*, Assoc. Coord. of Advis. for Univ. Undes. Fresh. B.S., City Coll. of N.Y.; B.S., M.S., N.C. State Univ.
- Solomon, Daniel Lester*, Prof. & Head of Stat. B.S., M.S., Ph.D., Fla. State Univ.
- Sonner, William Henry*, Assoc. Prof. of Phys. Ed. B.S., N.C. State Univ.; M.Ed., Univ. of N.C. at Chapel Hill.
- Sorensen, Kenneth Alan*, Ext. Prof. of Entom. B.S., Univ. of R.I.; M.S., Ph.D., Kan. State Univ.
- Soroos, Marvin Stanley*, Prof. & Head of Pol. Sci. & Pub. Adm. A.B., Dartmouth Univ.; M.A., Ph.D., Northwestern Univ.
- Sorrell, Furman Yates, Jr.*, Prof. of Mech. & Aero. Engr. & Mar., Earth & Atmos. Sci. B.S., N.C. State Univ.; M.S., Ph.D., Calif. Inst. of Tech.
- Sosower, Mark Lawrence*, Asst. Prof. of For. Lang. & Lit. A.B., M.A. (Hist.), M.A. (Classics), Univ. of Rochester; Ph.D., N.Y. Univ.
- Southern, Philip Sterling*, Assoc. Prof. in Charge of Entom. Ext. B.S., Davidson Coll.; Ph.D., N.C. State Univ.
- Soutiere, Edward C.*, Adj. Asst. Prof. of For. B.S., Univ. of Vt.; M.S., Tex. Tech. Univ.; Ph.D., Univ. of Maine.
- Sowell, Robert S.*, Prof. of Biol. & Agri. Engr. B.S., Miss. State Univ.; M.S., Kan. State Univ.; Ph.D., N.C. State Univ.
- Spanton, Donald L.*, Adj. Assoc. Prof. of Text. Mgmt. & Tech. B.S., Rennselaer Polytech. Inst.; M.S., Ga. Inst. of Tech.; Ph.D., Amer. Univ.
- Sparks, Marvin Randolph*, Supv. & Sr. Engr. Ext. Spec. in Ind. Ext. Serv. B.S., N.C. State Univ.
- Spaulding, Kathy A.*, Asst. Prof. of Anat., Physiol. Sci. & Radiol. D.V.M., Purdue Univ.
- Spears, Jerry Wayne*, Assoc. Prof. of Ani. Sci. B.S., M.S., Univ. of Ky.; Ph.D., Univ. of Ill.
- Spence, Lois L.*, Mar. Ed. Spec., U.N.C. Sea Grant Prog. A.B., Mary Baldwin Coll.; M.S., Fla. State Univ.
- Spencer, Stephanie L.*, Asst. Prof. of Hist. B.A., Oberlin Coll.; M.A., Ph.D., Univ. of Mich.
- Spencer, Suzanne*, Adj. Asst. Prof. of Plant Path. A.B., W. Va. Univ.; M.S., Univ. of Del.; Ph.D., N.C. State Univ.
- Spiekermann, Charles E.*, Asst. Prof. of Mech. & Aero. Engr. B.S., Univ. of Neb.; M.S., Ph.D., Mich. State Univ.
- Spiker, Steven L.*, Assoc. Prof. of Gen. B.S., M.S., Ph.D., Univ. of Iowa.
- Spilatro, Steven R.*, Res. Assoc. (USDA) in Crop Sci. B.A., Ohio Wesleyan Univ.; Ph.D., Indiana Univ.
- Spooner, Jean Dorothy*, Ext. Spec., Biol. & Agri. Engr. B.S., Cornell Univ.; M.S., N.C. State Univ.
- Sprague, Jerry Ronald*, Liaison Geneticist in For. B.S., N.C. State Univ.
- Sprinthall, Norman A.*, Prof. and Head of Couns. Ed. A.B., M.A., Brown Univ.; Ed.D., Harvard Univ.
- Spurr, Harvey Wesley, Jr.*, Prof. (USDA) of Plant Path. B.S., M.S., Mich. State Univ.; Ph.D., Univ. of Wis.
- Squire, David Roland*, Adj. Prof. of Chem. Engr. B.S., S. Methodist Univ.; Ph.D., Rice Univ.
- Stack, Edward M.*, Prof. of For. Lang. & Lit. A.B., A.M., Ph.D., Princeton Univ.
- Stadelmaier, Hans Heinrich*, Prof. of Mat. Sci. & Engr. Diplom.-Physiker (M.S. in Physics), Dr. Rer. Nat. (Sc.D.), Univ. of Stuttgart (Germany).
- Stafford, Thomas Hugh, Jr.*, Vice Chan. for Stud. Aff. A.B., Davidson Coll.; M.S., N.C. State Univ.; Ph.D., Fla. State Univ.
- Stahel, Edward Paul*, Prof. of Chem. Engr. B.S., Princeton Univ.; M.S., Univ. of Notre Dame; Ph.D., Ohio State Univ.
- Stalker, H. Thomas*, Assoc. Prof. of Crop Sci. B.S., M.S., Univ. of Ariz.; Ph.D., Univ. of Ill. at Urbana.
- Stallmann, Matthias F. M.*, Asst. Prof. of Comp. Sci. B.S., M.S., Yale Univ.; Ph.D., Univ. of Colo.
- Stalnaker, Clayton Lee*, Lect. in Univ. Stud., Phil. & Rel. A.B., Univ. of N.C. at Chapel Hill; B.D., Yale Univ.; M.A., Univ. of N.C. at Chapel Hill.
- Standaert, James E.*, Asst. Prof. of Econ. & Bus. B.A., Gonzaga Univ.; M.A., Ph.D., Wash. State Univ.
- Stanislav, Charles Michael*, Ext. Prof. of Ani. Sci. B.S., M.S., Penn. State Univ.; Ph.D., Okla. State Univ.
- Stanley, Ellen*, Ext. Spec. in Biol. & Agri. Engr. B.A., M.P.H., Univ. of N.C. at Chapel Hill.
- Starrett, James A.*, Lect. in Design.
- Steel, Bessie C.*, Box Off. Mgr., Athletics
- Steensen, Donald Henry John*, Assoc. Prof. of For. & Wood & Paper Sci. B.S., Iowa State Univ.; M.F., Ph.D., Duke Univ.
- Steer, Michael Bernard*, Asst. Prof. of Elect. & Comp. Engr. B.E., Ph.D., Univ. of Queensland.
- Stefanski, Leonard A.*, Asst. Prof. of Stat. B.S., Univ. of Ct.; M.S., Ph.D., Univ. of N.C. at Chapel Hill.
- Stein, Allen Frederick*, Prof. of Engl. A.B., M.A., N. Y. Univ.; Ph.D., Duke Univ.
- Stejskal, Edward O.*, Prof. of Chem., B.S., Ph.D., Univ. of Ill. at Urbana.
- Stephan, David Leigh*, Ext. Spec. in Entom. B.S., Cornell Univ.
- Stephenson, Thomas William*, Director, Ind. Ext. & App. Res. B.S.M.E., N.C. State Univ.
- Sternloff, Robert Elmer*, Prof. of Rec. Res. Adm. B.S., M.S., Univ. of Ill.; Ph.D., Univ. of Wis.
- Stevens, Charles Edward*, Assoc. Dean & Dir. of Res. & Grad. Stud. Prof. of Anat., Physiol. Sci. & Radiol., Sch. of Vet. Med. & Asst. Dir. Agric. Res. Sch. of Agric. & Life Sci. B.S., D.V.M., M.Sc., Ph.D., Univ. of Minn.
- Stevens, Jerry B.*, Prof. of Microbiol., Path. & Parasit. B.A., Harvard Univ.; D.V.M., Ph.D., Univ. of Calif. at Berkeley.
- Stevenson, Mark A.*, Head Gymnastics Coach. B.S., Univ. of Iowa.
- Stewart, Debra W.*, Prof. of Pol. Sci. & Pub. Adm. & Interim Dean, Graduate School, B.A., Marquette Univ.; M.A., Univ. of Md.; Ph.D., Univ. of N.C. at Chapel Hill.
- Stewart, James Mustian*, Assoc. Dir. for Res. Appl. in Water Resources Res. Inst. B.S., M.S., Ed.D., N.C. State Univ.
- Stewart, Joan Hinde*, Prof. & Head of For. Lang. & Lit. B.A., St. Joseph's Coll.; M. Phil., Ph.D., Yale Univ.
- Stewart, John G.*, Asst. Prof. of Phys. Ed. B.S., M.A., E. Ky. Univ.
- Stewart, John Stedman*, Adj. Assoc. Prof. of Mech. & Aero. Engr. B.S., Ph.D., N.C. State Univ.
- Stewart, Richard E.*, Asst. Basketball Coach B.A., Rutgers Univ.
- Stewart, Tony K.*, Asst. Prof. of Rel. B.A., Western Ky. Univ.; A.M., Ph.D., Univ. of Chicago.
- Stewart, William James*, Prof. of Comp. Sci. B.A., M.S., Ph.D., Queen's Univ. (Belfast).
- Stiff, Lee Vernon*, Asst. Prof. of Math. & Sci. Ed. B.S., Univ. of N.C. at Chapel Hill; M.A., Penn. State Univ.; M.A., Duke Univ.; Ph.D., N.C. State Univ.
- Stikeleather, Larry F.*, Prof. of Biol. & Agri. Engr. B.S., Ph.D., N.C. State Univ.
- Stines, Bill Junior*, Asst. Prof. of Stat. B.S., M.S., N.C. State Univ.
- Stinner, Ronald Edwin*, Prof. of Entom. & Biomath. B.S., N.C. State Univ.; Ph.D., Univ. of Calif. at Berkeley.
- Stipe, Robert Edwin*, Prof. of Land. Arch. A.B., L.L.B., Duke Univ.; M.R.P., Univ. of N.C. at Chapel Hill.

- Stitzinger, Ernest Lester*, Prof. of Math. B.A., M.A., Temple Univ.; Ph.D., Univ. of Pitt.
- Stocker, Timothy Chadwick*, Adj. Asst. Prof. of Adult & Comm. Coll. Ed. A.B., Glenville State Coll.; M.A., W. Va. Univ.; Ed.D., N.C. State Univ.
- Stoddard, Carla E.*, Asst. Athl. Trainer. B.A., N. Adams State Coll.; M.S., Fort Hays State Univ.
- Stoddard, Edward Forrest*, Assoc. Prof. of Mar., Earth & Atmos. Sci. A.B., Amherst Coll.; Ph.D., Univ. of Calif. at L.A.
- Stokes, Barrie Balzli*, Ext. Asst. Prof., Fam. Res. Mgt. Spec. B.S., J.D., Univ. of Ala.
- Stomp, Anne-Marie*, Asst. Prof. of For. B.S., M.S., Univ. of Conn.; Ph.D., N.C. State Univ.
- Stone, Elizabeth A.*, Assoc. Prof. of Comp. Ani. & Special Spec. Med. B.A., Scripps Coll.; M.S., Univ. of Ga.; D.V.M., Univ. of Calif. at Davis.
- Stone, John Randolph*, Assoc. Prof. of Civ. Engr. B.A.E., Univ. of Va., M.S.E., Princeton Univ.; M.S., Univ. of S.C.; Ph.D., Univ. of Va.
- Stone, Paul Samuel*, Ext. Assoc. Prof. of Econ. & Bus. & Res. Dev. B.S., M.S., Ph.D., N.C. State Univ.
- Stoneypher, Roy Wesley*, Adj. Assoc. Prof. of For. B.S., Ph.D., N.C. State Univ.
- Strenkowski, John S.*, Assoc. Prof. of Mech. & Aero. Engr. B.S., Univ. of Va.; M.S., Mass. Inst. of Tech.; Ph.D., Univ. of Va.
- Strickland, Gay G.*, Staff Phys., Stud. Health Serv. B.S., N.C. State Univ.; M.D., Univ. of N.C. at Chapel Hill.
- Strider, David Lewis*, Prof. of Plant Path. B.S., M.S., Ph.D., N.C. State Univ.
- Strong, Samuel W.*, Area Dir., Res. Life. B.A., N.C. State Univ.; M.Ed., Univ. of Ga.
- Stroschio, Michael A.*, Adj. Assoc. Prof. of Elect. & Comp. Engr. B.S., Univ. of N.C. at Chapel Hill; M. Phil., Ph.D., Yale Univ.
- Struble, Raimond Aldrich*, Prof. of Math. B.S., M.S., Ph.D., Univ. of Notre Dame.
- Stuber, Charles William*, Prof. (USDA) of Gen. B.Sc., M.S., Univ. of Neb.; Ph.D., N.C. State Univ.
- Stuckey, Perri Gay*, Ext. Dairy Husb. Spec., Ani. Sci. B.S., Berry Coll.
- Stuckey, William Clifton, Jr.*, Prof. of Text. Mgmt. & Tech. B.S., M.S., N.C. State Univ.
- Stucky, Jon M.*, Assoc. Prof. of Bot. B.S., M.S., Kan. State Teachers Coll.; Ph.D., Tex. Tech. Univ.
- Suggs, Charles Wilson*, Prof. of Biol. & Agri. Engr. B.S., M.S., Ph.D., N.C. State Univ.
- Suh, Moon Won*, Adj. Prof. of Text. Engr. & Sci. B.S., Seoul Nat'l Univ.; M.S., Ph.D., N.C. State Univ.
- Sullivan, Arthur L.*, Prof. & Head of Land Arch. B.A., M.S., Univ. of N. Hamp.; Ph.D., Cornell Univ.
- Sullivan, Gene Autry*, Prof. of Crop Sci. B.S., M.S., Ph.D., N.C. State Univ.
- Sullivan, William Taylor, Jr.*, Res. Asst. in Zool. B.S., N.C. State Univ.
- Sumner, Daniel A.*, Assoc. Prof. of Econ. & Bus. B.S., Calif. State Polytech. Univ.; M.A., Mich. State Univ.; M.A., Ph.D., Univ. of Chicago.
- Surh, Gerald D.*, Asst. Prof. of Hist. A.B., Univ. of Calif. at L.A.; M.A., Ph.D., Univ. of Calif. at Berkeley.
- Sutter, Stephen Roger*, Ext. Econ. Spec. in Econ. & Bus. B.S., Univ. of Maine; M.S., Cornell Univ.
- Suttle, Jimmie Ray*, Adj. Prof. of Elect. & Comp. Engr. B.Sc., Presbyterian Coll.; M.A., Duke Univ.; Ph.D., N.C. State Univ.
- Sutton, Turner B.*, Assoc. Prof. of Plant Path. A.B., Univ. of N.C. at Chapel Hill; M.S., Ph.D., N.C. State Univ.
- Suval, Elizabeth Manny*, Prof. of Soc. & Anth. B.A., American Univ.; Ph.D., N.C. State Univ.
- Swain, Robert Wayne*, Ext. Area Swine Spec. B.S., M.A., N.C. State Univ.
- Swaigood, Harold Everett*, Wm. Neal Reynolds Prof. of Food Sci. & Biochem. B.S., Ohio State Univ.; Ph.D., Mich. State Univ.
- Swallow, William H.*, Assoc. Prof. of Stat. A.B., Harvard Univ.; M.S., Ph.D., Cornell Univ.
- Swanson, Clifford R.*, Asst. Prof. of Anat., Physiol. Sci. & Radiol. B.S., M.S., D.V.M., Ohio State Univ.
- Spartzel, Kenneth Ray*, Assoc. Prof. of Food Sci. & Biol. & Agri. Engr. B.S., M.S., Ph.D., N.C. State Univ.
- Swiss, James Edwin*, Assoc. Prof. of Pol. Sci. & Pub. Adm. B.A., M.Phil., Ph.D., Yale Univ.
- Switzer, William Lawrence*, Assoc. Prof. of Chem. B.S., La. State Univ.; Ph.D., Univ. of Ill.
- Sykes, Edward R.*, Head, Men's Golf Coach & Coord., Athletics Facilities. B.S., N.C. State Univ.
- Sylla, Edith Dudley*, Prof. of Hist. & Asst. Dean for Res. & Grad. Prog. B.A., Radcliffe; M.A., Ph.D., Harvard Univ.
- Sylla, Richard Eugene*, Prof. of Econ. & Bus. B.A., M.A., Ph.D., Harvard Univ.
- Sylvester, John, Jr.*, Dir., N.C. Japan Center & Lect., School of Hum. & Soc. Sci. B.A., Williams Coll.; B.S., Georgetown Univ.
- Taheri, Javad*, Adj. Asst. Prof. of Ind. Engr. B.S., Tehran Univ.; M.S., W. Mich. Univ.; Ph.D., N.C. State Univ.
- Tai, Kuo-Chung*, Prof. of Comp. Sci. B.S., Nat'l Taiwan Univ.; M.S., Ph.D., Cornell Univ.
- Tanner, Donald Ray, Jr.*, Asst. Baseball Coach & Asst. Athl. Dir. B.S., N.C. State Univ.
- Tanner, James T., Jr.*, Sr. Min. Dressing Engr. in Min. Res. Lab. B.S., M.S., N.C. State Univ.
- Tarantini, George Louis*, Men's Head Soccer Coach.
- Tart, Jimmy C.*, Acting Head of Publication Section in Agri. Comm. B.S., N.C. State Univ.
- Turner, Fred Russell, Jr.*, Ext. Prof. of Food Sci. B.S., M.S., Univ. of Tenn.; Ph.D., Univ. of Ga.
- Tate, Brita M.*, Asst. Prog. Dir. of Univ. Stud. Cntr.
- Tate, Lloyd Patrick*, Asst. Prof. of Food Ani. & Equine Med. V.M.D., Univ. of Penn.
- Taylor, Dennis A.*, Exec. Asst. to Vice-Chan., Develop. B.A., Wake Forest Univ.; M.A., Appalachian State Univ.
- Taylor, Earl Wayne*, Prof. of Design B. Arch., N.C. State Univ.
- Taylor, Raymond G., Jr.*, Prof. and Head of Ed. Ldrshp. & Prog. Eval. B.S., Bucknell Univ.; B.D., Episcopal Theo. Sch.; M.S., Ed.D., Univ. of Penn.; M.P.A., Penn. State Univ.; M.B.A., Univ. of S. Maine.
- Taylor, Robin H.*, Lect. in Phys. Ed. B.A., M.A., Ohio State Univ.
- Teague, Ellen L.*, Asst. Registrar, Regis. & Rec. B.A., B.S., N.C. State Univ.
- Tector, John O.*, Asst. Prof. of Arch. B.A., St. Bonaventure Univ.; B.Arch., Case West. Reserve Univ.; M.App.Sci., Univ. of Waterloo (Canada).
- Teng, Ching Sung*, Prof. of Anat., Physiol. Sci. & Radiol. B.S., Tunghai Univ. (Taiwan); M.S., Ph.D., Univ. of Tex. at Austin.
- Teng, Christina T.*, Adj. Assoc. Prof. of Anat., Physiol. Sci. & Radiol. B.S., Tunghai Univ. (Taiwan); Ph.D., Univ. of Texas.
- Tesar, Paul*, Assoc. Prof. of Arch. Dipl., Technische Hochschule Wien; M.Arch., Univ. of Wash.
- Tess, Michael Walter*, Asst. Prof. of Ani. Sci. B.S., Calif. State Polytech. Univ.; M.S., Mont. State Univ.; Ph.D., Univ. of Neb. at Lincoln.
- Tetro, Mary A.*, Acad. Facilitator, Acad. Skills Prog. B.A., Univ. of Md.
- Tew, Raymond E.*, Career Plan. & Place. Counselor. B.S., Fla. State Univ.
- Tharp, Alan Lee*, Prof. of Comp. Sci. B.S.S.E., M.S., Ph.D., Northwestern Univ.
- Thaxton, J. Paul*, Adj. Prof. of Poul. Sci. B.S., M.S., Miss. State Univ.; Ph.D., Univ. of Ga.
- Thayer, Paul W.*, Prof. & Head of Psych. B.S., U.S. Merch. Mar. Acad.; B.S., Penn. State Univ.; Ph.D., Ohio State Univ.

- Theil, Elizabeth C.*, Prof. of Biochem. B.S., Cornell Univ.; Ph.D., Columbia Univ.
- Theil, Michael Herbert*, Prof. of Text. Chem. A.B., Cornell Univ.; Ph.D., Polytech. Inst. of Brooklyn.
- Thomas, Frank Bancroft*, Ext. Prof. of Food Sci. B.S., Univ. of Del.; M.S. Ph.D., Penn. State Univ.
- Thomas, Judith Fey*, Assoc. Prof. of Bot. & Asst. Dir. of the Phytotron. B.S., Univ. of Nev.; B.A., Princeton Theol. Sem.; M.S., Ph.D., N.C. State Univ.
- Thomas, Richard Joseph*, Prof. & Head of Wood & Paper Sci. & Prof. of Bot. B.S., Penn. State Univ.; M.W.T., N.C. State Univ.; D.F., Duke Univ.
- Thompson, Lafayette, Jr.*, Adj. Prof. of Crop Sci. B.S., N.C. State Univ.; Ph.D., Univ. of Ill.
- Thompson, William F.*, Univ. Res. Prof. of Bot. A.B., Princeton Univ.; Ph.D., Univ. of Wash.
- Thompson-Jones, Mary*, Lect. in Engl. B.A., Univ. of N. Mexico; M.A., Duke Univ.
- Thomson, Randall J.*, Assoc. Prof. of Soc. & Anth. B.A., Univ. of Tex.; M.A., Ph.D., Indiana Univ.
- Thorne, Lynn Bergold*, Lect. in Econ. & Bus. B.B.A., M.B.A., Baylor Univ.
- Thrall, Donald E.*, Prof. of Anat., Physiol. Sci. & Radiol. D.V.M., Purdue Univ.; M.S., Ph.D., Col. State Univ.
- Throneburg, Kevin W.*, Res. Assoc., Text. Engr. & Sci. B.S., N.C. State Univ.
- Thurman, Walter Nebeker*, Asst. Prof. of Econ. & Bus. B.S., Utah State Univ.; M.S., Mont. State Univ.; M.A., Ph.D., Univ. of Chicago.
- Tidwell, John E.*, Adj. Assoc. Prof. of Civ. Engr. B.E., Vanderbilt Univ.; M.S., Ph.D., Univ. of Tenn.
- Tilley, David Ronald*, Prof. of Phys. B.S., Univ. of N.C. at Chapel Hill; M.S., Vanderbilt Univ.; Ph.D., Johns Hopkins Univ.
- Tilman, Robert O.*, Prof. of Pol. Sci. & Pub. Adm. B.S., Memphis State Univ.; M.A., Ph.D., Duke Univ.
- Timothy, David Harry*, Prof. of Crop Sci., Bot., & Gen. B.S., M.S., Penn. State Univ.; Ph.D., Univ. of Minn.
- Tomasino, Charles*, Prof. of Text. Chem. B.S., M.S., Ph.D., Univ. of Fla.
- Tomaskovic-Devey, Donald T.*, Asst. Prof. of Soc. & Anth. B.A., Fordham Univ.; Ph.D., Boston Univ.
- Toole, William Bell, III*, Dean of the Sch. of Human. & Social Sci. & Prof. of Engl. B.A., Presbyterian Coll.; M.A., Ph.D., Vanderbilt Univ.
- Tooley, Mark Byron*, Ext. Spec./Res. Asst. in Entomol. B.S., Univ. of N.C. at Wilmington.
- Tope, Nadine Fortna*, Ext. Prof. of Ext. Home Ec. & Spec.-In-Chg. Foods & Nut. B.A., Cornell Coll.; M.S., Ph.D., Purdue Univ.
- Toptikar, Susan Margaret*, Assoc. Prof. of Design. B.A., Univ. of Mo. at Kan. City; M.F.A., Wash. Univ.
- Torquato, Salvatore*, Assoc. Prof. of Mech. & Aero. Engr. & Chem. Engr. B.S., Syracuse Univ.; M.S., Ph.D., State Univ. of New York at Stony Brook.
- Tove, Samuel B.*, Wm. Neal Reynolds Prof. & Head of Biochem. B.S., Cornell Univ.; M.S., Ph.D., Univ. of Wis.
- Towell, William Earnest*, Adj. Prof. of For. B.S., M.F., Univ. of Mich.
- Traer, Mary Elaine E.*, Lect., Hort. Sci. & Land. Arch. B.A., Oglethorpe Univ.; M.L.A., N.C. State Univ.
- Trew, Robert James, Jr.*, Assoc. Prof. of Elect. & Comp. Engr. B.E.E., General Motors Inst.; M.S.E., Ph.D., Univ. of Mich.
- Triantaphyllou, Anastasios Christos*, Prof. of Gen. Athens Superior School of Agri. (Greece); Ph.D., N.C. State Univ.
- Triantaphyllou, Hedwig Hirschmann*, Prof. of Plant Path. Ph.D., Univ. of Erlangen (Germany).
- Trombley, Gail E.*, Area Dir., Housing & Res. Life. B.A., Siena Coll.; M.Ed., Univ. of Hartford.
- Troost, Kay Michael*, Assoc. Prof. of Soc. & Anth. B.A., Carleton Coll.; M.A., Ph.D., Univ. of Minn.
- Trozler, Robert Tinnen*, Asst. Prof. of Ind. & Tech. Ed. B.S., M.I.A., N.C. State Univ.
- Troyer, James Richard*, Prof. of Bot. B.A., DePauw Univ.; M.S., Ohio State Univ.; Ph.D., Columbia Univ.
- Trubey, Katherine Carson*, Lect. in Math. B.S., Purdue Univ.; M.Ed., N.C. State Univ.
- Trussell, Henry Joel*, Prof. of Elect. & Comp. Engr. B.S., Ga. Tech. Univ.; M.S., Fla. State Univ.; Ph.D., Univ. of N. Mex.
- Tucker, Paul Arthur, Jr.*, Prof. of Text. Mgmt. & Tech. B.S., M.S., Ph.D., N.C. State Univ.
- Tucker, William Preston*, Prof. & of Chem. & Asst. Head of Undergrad. Stud. B.S., Wake Forest Univ.; M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Tung, Chi Chao*, Prof. of Civ. Engr. & Mar., Earth & Atmos. Sci. B.S., Tung Chi Univ. (Shanghai, China); M.S., Ph.D., Univ. of Calif. at Berkeley.
- Turinsky, Paul J.*, Prof. & Head of Nucl. Engr. B.S., Univ. of R.I.; M.B.A., Univ. of Pitts.; M.S.E., Ph.D., Univ. of Mich.
- Turnbull, Marianne Madonna*, Health Educ. in Stud. Health Serv. B.S., M.S., Ind. Univ.; M.A., Central Mich. Univ.; H.S.D., Ind. Univ.
- Turner, Carl Byron*, Prof. of Econ. & Bus. B.A., Duke Univ.; M.A., Harvard Univ.; Ph.D., Duke Univ.
- Turner, David W.*, Senior Statistician in Stat. B.S., W. Ill. Univ.; M.S., N.C. State Univ.
- Turner, Lynn Gilbert*, Assoc. Prof. of Food Sci. B.S., M.S., Univ. of Ga.; Ph.D., N.C. State Univ.
- Turner, Robert Marvin*, Dir. of Cont. Serv., Sch. of Engr. B.S., N.C. State Univ.
- Turner, William Lindsay*, Vice-Chan. for Ext. & Pub. Serv. & Ext. Prof. of Econ. B.S., M.S., N.C. State Univ.; D.P.A., Harvard Univ.
- Turyn, Walter William*, Adj. Lect. in Comp. Sci. A.B., M.B.A., Duke Univ.
- Tuttle, Joseph C.*, Lib. & Asst. Text. Lib. B.S., Wake Forest Univ.; M.Div., Southeastern Baptist Sem., M.S.L.S., Univ. of N.C. at Chapel Hill.
- Uhlinger, Christine*, Asst. Prof. of Food Ani. & Equine Med. B.A., Bucknell Univ.; V.M.D., Univ. of Penn.
- Ullrich, David Frederick*, Assoc. Prof. of Math. B.S., Rensselaer Polytech. Inst.; M.S., Case West. Reserve Univ.; Ph.D., Carnegie Inst. of Tech.
- Umschneider, John E.*, Lib. & Lib. Sys. Head. B.A., Univ. of Va.; M.S.L.S., Univ. of N.C. at Chapel Hill.
- Underwood, Doreen G.*, Asst. to Dir. of Craft Cntr.
- Underwood, Herbert A.*, Prof. of Zool. B.A., M.A., Ph.D., Univ. of Tex. at Austin.
- Unrath, Claude Richard*, Prof. of Hort. Sci. B.S., M.S., Ph.D., Mich. State Univ.
- Upchurch, Jefferson Woodrow, Jr.*, Sr. News Ed. in Agri. Comm. A.B., Univ. of N.C. at Chapel Hill; M.Ed., N.C. State Univ.
- Upchurch, Robert G.*, (USDA) Asst. Prof. of Plant Path. B.S., M.S., Ph.D., N.C. State Univ.
- Updike, Susan J.*, Asst. Prof. of Anat., Physiol. Sci. & Radiol. B.S., Bowling Green State Univ.; M.S., D.V.M., Ohio State Univ.; Ph.D., Wash. State Univ.
- Urguhart, Julie A.*, Area Dir., Housing & Resid. Life. B.S., M.Ed., Univ. of Va.
- Usry, Mary F.*, Asst. Dir. of Fin. Aid. A.B., Women's Coll. of the Univ. of N.C. at Greensboro; M.Ed., N.C. State Univ.
- Usry, Robert Harmon*, Ext. Econ. Spec. & Lect. in Econ. & Bus. B.S., M. Econ., N.C. State Univ.
- Uzzell, Odell*, Prof. of Soc. & Anth. B.S., Fayetteville State Univ.; M.A., Ph.D., Ohio State Univ.
- Valvano, James T.*, Head Basketball Coach, Dir. of Athl., Dir. of Reynolds Col. B.A., Rutgers Univ.
- VanBenthuyzen, Dan J.*, Adj. Instr. in Comp. Sci. B.S., Indiana Univ.; M.S., N. Ill. Univ.
- Van Breeman, Richard B.*, Asst. Prof. of Chem. B.A., Oberlin Coll.; Ph.D., Johns Hopkins Univ.
- Van Camp, Steven D.*, Asst. Prof. of Food Ani. and Equine Med. B.S., D.V.M., Univ. of Calif. at Davis.

- Vanderbergh, John G., Prof. & Head of Zool. B.A., Montclair State Coll.; M.S., Ohio Univ.; Ph.D., Penn. State Univ.
- Van Der Burgt, Petrus J.M., Res. Assoc. in Phys. Ph.D., Rijksuniversiteit Utrecht
- VanderKam, James Claire, Prof. of Rel. A.B., Calvin Coll.; B.D., Calvin Theol. Sem.; Ph.D., Harvard Univ.
- VanderLugt, Anthony, Prof. of Elect. & Comp. Engr. B.S., Calvin Coll.; B.S.E.E., M.S.E.E., Univ. of Mich.; Ph.D., Univ. of Reading (England).
- VanderVaart, Hubertus Robert, Drexel Prof. of Stat. & Biomath. Ph.D., Leiden Univ. (The Netherlands).
- VanderWall, William John, Asst. Prof. of Occup. Ed. B.A., Montclair State Coll.; M.A., Ph.D., N.C. State Univ.
- VanDeVeer, Albert Donald, Prof. of Phil. B.A., Wake Forest Univ.; B.D., Colgate Rochester Divinity School; M.A., Ph.D., Univ. of Chicago.
- Van Duyn, John Wey, Prof. of Entom. B.S., M.S., Univ. of Fla.; Ph.D., Clemson Univ.
- Van Dyke, Cecil Gerald, Assoc. Prof. of Bot. B.S., E. Ill. Univ.; M.S., Ph.D., Univ. of Ill.
- Van Stee, Ethard Wendel, Adj. Assoc. Prof. of Anat., Physiol. Sci. & Radiol. B.S., D.V.M., Mich. State Univ.; M.S., Ph.D., Ohio State Univ.
- Vasu, Ellen Storey, Asst. Prof. of Curr. & Instr. A.B., M.A.T., San Diego State Coll.; Ph.D., South. Ill. Univ.
- Vasu, Michael Lee, Assoc. Prof. of Pol. Sci. & Pub. Adm. B.A., M.C.P., Calif. State Univ.; Ph.D., S. Ill. Univ.
- Vepraskas, Michael John, Assoc. Prof. of Soil Sci. B.S., M.S., Univ. of Wis.; Ph.D., Tex. A&M Univ.
- Verghese, Kuruvilla, Prof. of Nucl. Engr. B.S., Coll. of Engr. (Trivandrum, Kerala, India); M.S., Ph.D., Iowa State Univ.
- Vess, David Oliver, Instr. in Text. Mgmt. & Tech. B.A., Emory Univ.; M.S., N.C. State Univ.
- Vess, Robert Jay, Lect. in Mech. & Aero. Engr. B.S., N.C. State Univ.
- Vick, Candace Goode, Ext. Asst. Prof. & Ext. 4-H & Youth Dev. Spec. B.S., M.S., N.C. State Univ.; Re.D., Indiana Univ.
- Vickery, Kenneth Powers, Assoc. Prof. of Hist. B.A., Duke Univ.; Ph.D., Yale Univ.
- Vincent, Kenneth Steven, Assoc. Prof. of Hist. B.A., M.A., Ph.D., Univ. of Calif. at Berkeley.
- Vogel, Phyllis Hays, Asst. Dir. of Music. B.M., M.M., D.M.A., Peabody Conserv. of Music.
- Volk, Richard James, Prof. of Soil Sci. & Hort. Sci. B.S., M.S., Purdue Univ.; Ph.D., N.C. State Univ.
- Wages, Dennis Paul, Asst. Prof. of Food Ani. & Equine Med. B.S., D.V.M., Kan. State Univ.; M.S., Iowa State Univ.
- Wagger, Michael G., Asst. Prof. in Crop Sci. B.S., M.S., Univ. of Ky.; Ph.D., Kan. State Univ.
- Wahl, George Henry, Jr., Prof. of Chem. B.S., Fordham Coll.; M.S., Ph.D., N. Y. Univ.
- Wahls, Harvey Edward, Prof. & Assoc. Head, Civ. Engr. B.S.C.E., M.S.C.E., Ph.D., Northwestern Univ.
- Wainwright, Stephen Andrew, Adj. Prof. of Design. B.S., Duke Univ.; B.A., M.A., Univ. of Cambridge; Ph.D., Univ. of Calif. at Berkeley.
- Walden, Michael Leonard, Assoc. Prof. of Econ. & Bus. B.A., Univ. of Cincinnati; M.S., Ph.D., Cornell Univ.
- Walek, Mary Louise, Assoc. Prof. & Asst. Head of Soc. & Anth. B.A., Ph.D., Univ. of Fla.
- Walgenbach, James F., Asst. Prof. of Entom. B.S., M.S., Ph.D., Univ. of Wisc., Madison
- Walker, N. William, Assoc. Prof. of Psych. A.B., Ed.M., Ed.D., Rutgers Univ.
- Walker, Richard, Asst. Prof. of Microbiol., Path. & Parasit. B.S., Colo. State Univ.; D.V.M., M.P.V.M., Univ. of Calif. at Davis.
- Wall, Gary Eugene, Lect. in Phys. Ed. B.S., M.S., N.C. Central Univ.
- Wall, John Nelson, Jr., Assoc. Prof. of Engl. & Dir., Scholars' Prog. A.B., Univ. of N.C. at Chapel Hill; A.M., Duke Univ.; M.Div., Episcopal Theol. School; Ph.D., Harvard Univ.
- Wallace, James Macaulay, III, Assoc. Prof. of Soc. & Anth. B.S., St. Joseph's Coll.; M.A. (Lat. Am. Stud.), M.A. (Anth.), Ph.D., Indiana Univ.
- Wallace, Robert W., Asst. Prof. of For. Lang. & Lit. B.A., Columbia Coll.; B.A., Wadham Coll., Oxford; Ph.D., Harvard Univ.
- Wallace, Thomas Michael, Asst. Prog. Dir., Univ. Stud. Ctr. B.A., N.C. State Univ.
- Walls, Dwayne E., Adj. Lect. in Engl.
- Walsh, William Kershaw, Prof. of Text. Chem. & Assoc. Dean for Text. Res. & Grad. Studies. B.S., M.S., Univ. of S. C.; Ph.D., N.C. State Univ.
- Walter, William Mood, Jr., Prof. (USDA) of Food Sci. B.S., The Citadel; M.S., Ph.D., Univ. of Ga.
- Walters, Jeffrey R., Asst. Prof. of Zool. B.A., West Va. Univ.; Ph.D., Univ. of Chicago.
- Waltnr, Nellie Laird, Lib. & Asst. Dir. of Tech. Serv. A.B., Bethel Coll.; M.S., Univ. of N.C. at Chapel Hill.
- Ward, Ann Baker, Lib. & Head, Interlib. Ctr. B.A., Univ. of N.C. at Greensboro; M.A., Appalachian State Univ.
- Ward, Eleavia Bailey, Asst. Dir. of Music. B.M.E., Howard Univ.
- Ward, Laviece Coz, Lect. in Engl. B.A., Univ. of N.C. at Wilmington; M.A., Univ. of Colo.
- Ward, M. Candice, Lect. in Engl. B.A., Univ. of Iowa; M.F.A., Univ. of Mass-Amherst.
- Warren, Alice Ann, Continuing Ed. Spec. B.S., Campbell Coll.; M.Ed., N.C. State Univ.
- Warren, Marlin Roger, Jr., Prof. & Head of Rec. Res. Adm. B.S., Wake Forest Univ.; M.S., W. Va. Univ.; Re.D., Indiana Univ.
- Warren, Samson, Lab. Supv. in Com. Sci.
- Warren, Stuart L., Researcher in Hort. Sci. B.S., M.S., Univ. of Ill. at Urbana; Ph.D., N.C. State Univ.
- Washburn, Steven P., Asst. Prof. of Ani. Sci. B.S., W. Va. Univ.; M.S., Univ. of Wis.; Ph.D., W. Va. Univ.
- Wasik, John Louis, Prof. of Stat. & Psych. B.S., E. Mich. Univ.; M.S., Univ. of Mich.; Ed.D., Fla. State Univ.
- Wasson, Kuldip S., Adj. Asst. Prof. of Elect. & Comp. Engr. B.S., McGill Univ.; M.S., Univ. of Ottawa; Ph.D., Univ. of Waterloo.
- Waters, William Meade, Jr., Assoc. Prof. of Math. & Sci. Ed. & of Math. B.S., Ky. Wesleyan Coll.; M.A.Ed., Wash. Univ.; M.A., La. State Univ.; Ph.D., Fla. State Univ.
- Watkins, Rupert William, Ext. Prof. of Biol. & Agri. Engr. B.S., M.S., N.C. State Univ.
- Watson, Gerald Francis, Jr., Assoc. Prof. of Meteorol. B.S., Penn. State Univ.; M.S., Univ. of Chicago; Ph.D., Fla. State Univ.
- Watson, Julian Perry, Dir. of Music. B.S., Fla. State Univ.; M.A., Appalachian State Teachers' Coll.
- Watson, Larry Wayne, Assoc. Prof. of Math. & Sci. Ed. B.S., N.C. State Univ.; M.M., Univ. of Tenn.; Ed.D., Duke Univ.
- Watterson, James W., Adj. Lect. in Elect. & Comp. Engr. B.S.E.E., N.C. State Univ.; M.S.E., Ph.D., Univ. of Fla.
- Watts, Bernadette G., Dist. Prog. Leader in Home Econ. & Ext. Instr., Agri. Ext. Serv. B.S., Bennett Coll.; M.S.H.E., E. Carolina Univ.
- Wayne, William Wright, Weight Training Coach.
- Weaver, Jack N., Mgr. of Nuclear Services
- Webb, Benjamin Davis, Lect. in Occup. Ed. B.S., M.S., N.C. State Univ.
- Weber, Jerome Bernard, Prof. of Crop Sci. & Soil Sci. B.S., M.S., Ph.D., Univ. of Minn.
- Weddle, J. Owen, Univ. Comm. Coord., Univ. Relations. B.A., Univ. of Wis. at Madison, M.A., Univ. of Wash., Ph.D., Univ. of N.C. at Chapel Hill.

- Weed, Sterling Barg, Prof. of Soil Sci. B.A., Brigham Young Univ.; M.S., Ph.D., N.C. State Univ.
- Weedon, John Franklin, Sr., Assoc. Athl. Dir. B.S., Univ. of Md.
- Weeks, Raymond W., Adj. Lect. in Comp. Sci. B.A., Pan Amer. Univ.; M.S., N.C. State Univ.
- Weeks, Willard Wesley, Prof. of Crop Sci. B.S., M.S., Miss. State Univ.; Ph.D., Univ. of Ky.
- Wehe, Albert H., Adj. Prof. of Chem. Engr. B.S., M.S., La. State Univ.; Ph.D., Univ. of Tx.
- Wehner, Todd Craig, Assoc. Prof. of Hort. Sci. A.B., Univ. of Calif. at Berkeley; M.S., Ph.D., Univ. of Wis. at Madison.
- Wehring, Bernard William, Prof. of Nucl. Eng. & Dir. of Nucl. Reactor Prog. B.S.E., Univ. of Mich.; M.S., Ph.D., Univ. of Ill. at Urbana.
- Weidhaas, Nicholas C., Res. Assoc. in Wood & Paper Sci. B.S., M.S., Univ. of Mass.
- Weinberg, Gary Roy, Lect. in Engl. B.A., Bluefield State Coll.; M.A., Va. Polytech. Inst. & State Univ.
- Weinel, Eleanor Foote, Asst. Prof. of Arch. B.A., Dickinson Coll.; M.Arc., Carnegie-Mellon Univ.
- Weir, Bruce Spencer, Prof. of Stat. & Gen. B.S., Univ. of Canterbury; Ph.D., N.C. State Univ.
- Weir, Robert John, Assoc. Prof. & Dir. of For. B.S., Univ. of Maine; M.S., Ph.D., N.C. State Univ.
- Weiser, Conrad Walton, Craft Shop Dir., Univ. Stud. Ctr. B.A., Univ. of N.C. at Chapel Hill; M.A., Instituto Allende (Mexico).
- Welch, Martha M., Asst. Registrar. B.A., Meredith Coll.
- Wells, Carol Glenn, Adj. Prof. of For. B.S., W.Ky. Univ.; M.S., Univ. of Ky.; Ph.D., Univ. of Wis.
- Wells, Robert Charles, Prof. of Econ. & Bus. & Assoc. Dir., N.C. Agri. Ext. Serv. B.S., Univ. of Conn.; M.S., Ph.D., Cornell Univ.
- Welsch, Frank, Adj. Prof. of Anat., Physiol. Sci., & Radiol. D.V.M., Freie Univ., Berlin.
- Wenig, Robert E., Assoc. Prof. of Occup. Ed. B.S., M.Ed., Bowling Green State Univ.; Ph.D., Ohio State Univ.
- Wentworth, Thomas R., Assoc. Prof. of Bot. A.B., Dartmouth Coll.; Ph.D., Cornell Univ.
- Werner, Dennis James, Assoc. Prof. of Hort. Sci. B.S., Penn. State Univ.; M.S., Ph.D., Mich. State Univ.
- Wernsman, Earl Allen, Prof. of Crop Sci. & Gen. B.S., M.S., Univ. of Ill.; Ph.D., Purdue Univ.
- Wertz, Dennis William, Assoc. Prof. of Chem. B.S., Univ. of Md.; Ph.D., Univ. of S.C.
- Wesen, Donald Philip, Ext. Prof. of Ani. Sci. B.S., M.S., Wash. State Univ.; Ph.D., Univ. of Wis.
- Wesler, Oscar, Prof. of Stat. & Math. B.S., City Coll. of N.Y.; M.S., N.Y. Univ.; Ph.D., Stanford Univ.
- Wessels, Walter John, Assoc. Prof. of Econ. & Bus. B.A., Grove City Coll.; M.A., Ph.D., Univ. of Chicago.
- West, Harry Carter, Assoc. Prof. of Engl. B.A., Davidson Coll.; M.A., Ph.D., Duke Univ.
- West, James Preston, Ext. Assoc. Prof., 4-H & Youth Dev. & Dist. Ext. Dir. B.S., N.C. A&T State Univ.; M.Ed., Ed.D., N.C. State Univ.
- West, Paul Duval, Jr., Assoc. Dir. of Fin. Aid. B.S., Campbell Coll.
- Westbrook, Bert Whitley, Prof. of Psych. A.B., High Point Coll.; M.Ed., Univ. of S. C.; Ed.D., Fla. State Univ.
- Westerman, Philip W., Prof. of Biol. & Agri. Engr. B.S.A.E., M.S.A.E., Ph.D., Univ. of Ky.
- Westerveld, Willem Bernard, Asst. Prof. of Phys. Doctorandus, Doct. of Math. & Phys. Sci., Rijksuniversiteit Utrecht, (Netherlands).
- Westmoreland, Grover W., Ext. Dairy Husb. Spec. in Agri. Ext. Serv. B.S., N.C. State Univ.
- Weston, William David, Dir. of Coop. Ed. B.S., Castleton State Coll.; M.Ed., Boston Univ.; Ph.D., Univ. of N.C. at Chapel Hill
- Whangbo, Myung Hwan, Assoc. Prof. of Chem. B.Sc., M.Sc., Seoul Nat'l Univ. (S. Korea); Ph.D., Queen's Univ. (Canada).
- Wheatley, John Hunter, Assoc. Prof. of Math. & Sci. Ed. B.A., M.A.T., Duke Univ.; Ph.D., Ohio State Univ.
- Wheeler, Elisabeth Anne, Prof. of Wood & Paper Sci. B.A., Reed Coll.; M.A., Ph.D., S. Ill. Univ.
- Whisnant, Richard Austin, Adj. Prof. of Mech. and Aero. Engr. B.S., Ph.D., Ga. Inst. of Tech.
- Whitacre, Michael David, Assoc. Prof. of Food Ani. & Equine Med. & Ani. Sci. B.S., M.S., D.V.M., Ohio State Univ.
- Whitaker, Thomas Burton, Prof. (USDA) of Biol. & Agri. Engr. B.S., M.S., N.C. State Univ.; Ph.D., Ohio State Univ.
- White, Arthur Lee, Asst. to Vice-Chan. for Stud. Aff. B.S., Cornell Univ.
- White, Mark W., Assoc. Prof. of Elect. & Comp. Engr. B.S.E.E., Univ. of Neb.; Ph.D., Univ. of Calif. at Berkeley
- White, Robert Ernest, Assoc. Prof. of Math. B.S., N.Ill. Univ.; M.S., Ph.D., Univ. of Mass.
- White, Robert K., Dir. of Adult Credit Prog. B.S., M.S., Indiana Univ.; Ed.D., N.C. State Univ.
- Willow, Lon Weidner, Assoc. Prof. of Ani. Sci. B.S., Univ. of Ky.; M.S., Univ. of Fla.; Ph.D., Univ. of Wis.
- Whitmore, Mary Jacobs, Expanded Food & Nutrition Ed. Prog. Coord. B.S., Bennett Coll.; M.S., N.C. Central Univ.
- Whitworth, Ulysses G., Jr., Asst. Prof. of Ani. Sci. B.S., D.V.M., Tuskegee Inst.; M.P.H., Univ. of N.C. at Chapel Hill.
- Wilchins, Susan, Asst. Prof. of Prod. Design. B.A., M.S., Indiana Univ.; M.F.A., Univ. of Kansas.
- Wilds, Albert Auburn, Jr., Min. Chemist, Min. Res. Lab. B.A., Univ. of N.C. at Asheville.
- Wilk, John Clark, Prof. of Ani. Sci. B.S., Kan. State Univ.; M.S., Ph.D., Univ. of Minn.
- Wilkerson, Gail G., Asst. Prof. of Crop Sci. B.S., Duke Univ.; M.S., Ph.D., Univ. of Fl.
- Wilkinson, Richard R., Prof. of Land. Arch. & For. Res. B.S., Penn. State Univ.; M.L.Arch., Univ. of Mich.
- Williams, James Oliver, Prof. of Pol. Sci. & Pub. Adm. B.S., E. Carolina Univ.; M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Williams, Joel Lawson, Adj. Assoc. Prof. of Chem. Engr. B.S., M.S., Ph.D., N.C. State Univ.
- Williams, Kathleen M., Asst. Prof. of Hort. Sci. B.A., Univ. of Calif. at Santa Barbara; M.S., Univ. of Calif. at Davis; Ph.D., Cornell Univ.
- Williams, Levern, Jr., Instr. in Math. B.S., St. Aug. Coll.; M.A., Morgan State Univ.
- Williams, Linda Ruth, Asst. Prof. of Soc. & Anth. B.S.W., N.C. State Univ.; M.S.W., Univ. of N.C. at Chapel Hill.
- Williams, Mary Cameron, Prof. of Engl. B.A., Wellesley Coll.; M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Williams, Paul F., Assoc. Prof. of Econ. & Bus. B.S.F., W. Va. Univ.; M.B.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Williams, Robert Travis, Assoc. Dean of Sch. of Ed. & Lect. in Ed. Ldrshp. & Prog. Eval. B.S., D.C. Teachers Coll.; M.A., W. Carolina Coll.; Ed.D., Univ. of N.C. at Chapel Hill.
- Williamson, Norman F., Jr., Asst. Prof. of Comp. Sci. B.S., Emory Univ.; M.S., Tulane Univ.; Ph.D., N.C. State Univ.
- Willis, William Edward, Coord. of Comp. Oper. & Lect. in Engr. B.S., Ph.D., N.C. State Univ.
- Willits, Daniel Hoover, Prof. of Biol. & Agri. Engr. B.S., M.S., Univ. of Fla.; Ph.D., Univ. of Ky.
- Wilson, Beth Evelyn, Asst. Prof., Rec. Res. Adm. B.S., M.S., Ph.D., N.C. State Univ.
- Wilson, Edward H., Jr., Adj. Asst. Prof. of Adult & Comm. Coll. Ed. A.B., M.A., Univ. of N.C. at Chapel Hill; Ed.D., N.C. State Univ.
- Wilson, Jack Wilfred, Assoc. Prof. of Econ. & Bus. B.B.A., M.A., Ph.D., Univ. of Okla.

- Wilson, James Blake, Prof. & Asst. Head of Math. M.S., Cornell Univ.; B.S., Ph.D., Univ. of Fla.
- Wilson, John Henry, Jr., Ext. Assoc. Prof. of Hort. Sci. & Plant Path. B.S., Wake Forest Univ.; M.S., N.C. State Univ.
- Wilson, Karen G., Adj. Asst. Prof. of Entom. B.A., Mass. Inst. of Tech.; M.S., Ph.D., N.C. State Univ.
- Wilson, Lorenzo George, Prof. of Hort. Sci. B.S., Cornell Univ.; M.S., Wash. State Univ.; Ph.D., Mich. State Univ.
- Wilson, Richard Ferrol, Prof. (USDA) of Crop Sci. B.Sc., W. Ill. Univ.; M.Sc., Ph.D., Univ. of Ill.
- Wimberly, Ronald C., Prof. of Soc. & Anth. B.A., La. Univ.; M.S., Fla. State Univ.; Ph.D., Univ. of Tenn.
- Wineland, Michael J., Asst. Prof. of Poul. Sci. B.S., M.S., Ph.D., Univ. of Wis. at Madison.
- Winslow, Timothy Clare, Lect. in Phys. Ed. B.S., M.Ed., E. Carolina Univ.
- Winstead, Nash Nicks, Prov. & Vice-Chan., NCSU & Prof. of Plant Path. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of Wis. at Madison.
- Winston, Bruce A., Cont. Ed. Spec. B.A., Shaw Univ.; M.A., N.C. State Univ.; Ph.D., Southern Ill. Univ.
- Winston, Hubert Melvin, Assoc. Prof. of Chem. Engr. & Dir., Undergrad. Acad. Aff. B.S., M.S., Ph.D., N.C. State Univ.
- Wiser, Edward Hempstead, Prof. of Biol. & Agri. Engr. B.S., Iowa State Univ.; M.S., Ph.D., N.C. State Univ.
- Wishy, Bernard W., Prof. of Hist. B.A., Columbia Univ.; M.A., Yale Univ.; Ph.D., Columbia Univ.
- Witherspoon, Augustus McIver, Assoc. Dean, Grad. Sch. & Prof. of Bot. B.S., Claflin Coll.; M.S., Ph.D., N.C. State Univ.
- Witt, Mary Ann F., Assoc. Prof. of For. Lang. & Lit. B.A., Wellesley Coll.; M.A., Univ. of Calif. at Berkeley; Ph.D., Harvard Univ.
- Wittkamp, Joel M., Assoc. Prof. of Prod. Design. B.F.A., Univ. of Ill.; M.F.A., Royal Coll. of Art (England).
- Wohlgenant, Michael K., Assoc. Prof. of Econ. B.S., M.S., Mont. State Univ.; Ph.D., Univ. of Calif. at Davis.
- Wolcott, Thomas G., Prof. of Mar., Earth & Atmos. Sci. & Zool. B.A., Ph.D., Univ. of Calif. at Riverside.
- Wollum, Arthur George, II, Prof. of Soil Sci. & For. B.S., Univ. of Minn.; M.S., Ph.D., Ore. State Univ.
- Won, Ihn Jae, Prof. of Mar., Earth & Atmos. Sci. B.S., Seoul Nat'l Univ. (Korea); M.S., Ph.D., Columbia Univ.
- Wood, Denis, Assoc. Prof. of Land. Arch. B.A., Case West. Reserve Univ.; M.A., Ph.D., Clark Univ.
- Woodrum, Eric M., Assoc. Prof. of Soc. & Anth. B.A., Univ. of Houston; M.A., Ph.D., Univ. of Tex. at Austin.
- Wooten, Charles R., Jr., Ext. Comm. Spec., Agri. Comm. B.S., N.C. State Univ.
- Workman, Gary Steven, Lab. Demonstr. for For. Lang. & Lit.
- Worsham, Arch Douglas, Prof. of Crop Sci. B.S., M.S., Univ. of Ga.; Ph.D., N.C. State Univ.
- Worsley, George Lawrence, Jr., Vice-Chan. for Fin. & Bus. B.S., Univ. of N.C. at Chapel Hill.
- Wortman, Jimmie Jack, Prof. of Elect. & Comp. Engr. B.S., N.C. State Univ.; M.S., Ph.D., Duke Univ.
- Wright, Charles Gerald, Prof. of Entom. B.S., M.S., Univ. of Md.; Ph.D., N.C. State Univ.
- Wright, Donna Sapp, Teach. Tech. in Botany. B.S., M.S., N.C. State Univ.
- Wright, Stephen J., Asst. Prof. of Math. B.Sc., Ph.D., Univ. of Queensland (Australia).
- Wyatt, Lane, Ext. Spec., Bio. & Agri. Engr. B.S., Lewis & Clark Coll.; M.S. Colo. State Univ.
- Wynn, Phail, Jr., Adj. Asst. Prof. of Adult and Comm. Coll. Ed. B.A., Univ. of Okla.; M.Ed., Ed.D., N.C. State Univ.
- Wynn, Tommy Elmer, Assoc. Prof. of Bot. B.S., Fort Valley State Coll.; M.S., Ph.D., Purdue Univ.
- Wynne, Johnny Calvin, Prof. of Crop Sci. B.S., M.S., Ph.D., N.C. State Univ.
- Wyriek, Deborah B., Asst. Prof. in Engl. B.A., Duke Univ.; M.A., N.C. State Univ.; Ph.D., Duke Univ.
- Yancey, Edwin Lovell, Dist. Ext. Dir. in Agri. Ext. Serv. B.A., M.Ed., N.C. State Univ.
- Yeh, Yei-Yu, Asst. Prof. of Psych. B.A., Nat'l. Taiwan Univ.; A.M., Univ. of Calif. at Berkeley; Ph.D., Univ. of Ill. at Champaign.
- Ying, Alice Y., Res. Assoc. in Nucl. Engr. B.S., Nat. Tsing-Hua Univ. (Taiwan); M.S., Ph.D., Univ. of Tinn.
- York, Alan Clarence, Assoc. Prof. of Crop Sci. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of Ill. at Urbana.
- Young, Brenda C., Area Dir., Res. Life B.A., Newberry Coll.; M.Ed., Clemson Univ.
- Young, Clyde Thomas, Prof. of Food Sci. & Crop. Sci. B.S., M.S., N.C. State Univ.; Ph.D., Okla. State Univ.
- Young, Eric, Assoc. Prof. of Hort. Sci. B.A., Miami Univ.; Ph.D., Mich. State Univ.
- Young, James Herbert, Prof. of Biol. & Agri. Engr. B.S.A.E., M.S.A.E., Univ. of Ky.; Ph.D., Okla. State Univ.
- Young, Margaret Sery, Assoc. Prof. of Comp. Ani. & Special Spec. Med. B.A., Alverno Coll.; M.A., Loyola Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- Young, Robert Vaughan, Jr., Prof. of Engl. B.A., Rollins Coll.; M.Phil., Ph.D., Yale Univ.
- Younts, Bryce R., Dir. of Alum. Relat. B.S., N.C. State Univ.
- Yow, Sandra Kay, Women's Head Basketball Coach & Asst. Coord. of Women's Athl. B.S., E. Carolina Univ.; M.Ed., Univ. of N.C. at Greensboro.
- Yu, Nancy Ru-woei, Lib. & Monographic Cat. Lib. B.Ed., Taiwan Normal Univ.; M.S., Univ. of Ill.
- Zavada, John M., Adj. Prof. of Phys. B.A., Catholic Univ. of Amer.; M.S., Ph.D., N.Y. Univ.
- Zering, Kelly D., Asst. Prof. of Econ. & Bus. B.S.A., M.S., Univ. of Manitoba; Ph.D., Univ. of Calif. at Davis.
- Zia, Paul Zung-Teh, Prof. & Head of Civ. Engr. B.S.C.E., Nat'l. Chiao Tung Univ.; M.S.C.E., Univ. of Wash.; Ph.D., Univ. of Fla.
- Zingraff, Matthew Thomas, Assoc. Prof. of Soc. & Anth. B.S., M.S., Va. Commonwealth Univ.; Ph.D., Bowling Green State Univ.
- Zorowski, Carl Frank, R. J. Reynolds Prof. of Mech. & Aero. Engr. & Dir. of ISMEI. B.S., M.S., Ph.D., Carnegie Inst. of Tech.
- Zuckerman, Gilroy Joel, Assoc. Prof. of Econ. B.A., State Univ. of N.Y. at Binghamton; M.E., Ph.D., N.C. State Univ.

Emeritus Faculty

- Allen, Alexander Vastine*, Ext. Prof. Emeritus of Ani. Sci. B.S., Va. Polytech. Inst.; M.S., N.C. State Univ.
- Allgood, James Glenn*, Ext. Assoc. Prof. Emeritus of Econ. B.S., M.S., N.C. State Univ.
- Anderson, Clifton A.*, Henry A. Foscue Prof. Emeritus of Furn. Manufact. & Mgmt. B.S.E.E., A.B., Univ. of S. Dakota; M.S., Penn. State Univ.; Ph.D., Ohio State Univ.
- Anderson, Donald Benton*, Prof. Emeritus of Bot. B.A., B.Sc.Ed., M.A., Ph.D., Ohio State Univ.
- Andrews, Walter Glenn*, Ext. Prof. Emeritus of Poul. Sci. B.S., N.C. State Univ.; M.S., Ed.D., Cornell Univ.
- Asbill, Clarence Monroe, Jr.*, Prof. Emeritus of Text. B.S.E.E., Clemson Coll.
- Aull, Louis E.*, Asst. Prof. Emeritus of Soil Sci. B.S., Clemson Univ.; M.S., Univ. of Ky.
- Austin, William Wyatt, Jr.*, Prof. Emeritus of Mat. Engr. B.S., Birmingham Southern Coll.; M.S., Ph.D., Vanderbilt Univ.
- Aycock, Robert*, Prof. Emeritus of Plant Path. & Hort. Sci. B.S., La. State Univ.; M.S., Ph.D., N.C. State Univ.
- Babeock, Willard Farrington*, Prof. Emeritus of Civ. Engr. S.B., S.M., Mass. Inst. of Tech.
- Banadyga, Albert A.*, Ext. Prof. Emeritus of Hort. Sci. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of Wis.
- Barber, Clifford Warren*, Prof. Emeritus of Poul. Sci. D.V.M., Colo. State Univ.; Ph.D., Cornell Univ.
- Barclay, William John*, Prof. Emeritus of Elect. & Comp. Engr. B.S., Ore. State Coll.; E.E., Ph.D., Stanford Univ.
- Barfoot, Aldos Cortez, Jr.*, Prof. Emeritus of Wood & Paper Sci. B.S., Master Wood Tech., N.C. State Univ.; D.F., Duke Univ.
- Barkley, Key Lee*, Prof. Emeritus of Psych. B.A., Berea Coll.; M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Barnes, Donald Warren, Jr.*, Assoc. Prof. Emeritus of Arch. A.B., Mercer Univ.; M.Arch., Univ. of Calif. at Berkeley; Ph.D., Tex. A & M Univ.
- Barrick, Elliot Roy*, Prof. Emeritus of Ani. Sci. B.S., Okla. A&M Coll.; M.S., Ph.D., Purdue Univ.
- Bartholomew, William Victor*, Prof. Emeritus of Soil Sci. B.S., Brigham Young Univ.; M.S., Ph.D., Iowa State Univ.
- Bartley, Andrew Jackson*, Prof. Emeritus of Econ. B.S., B.A., M.A., Univ. of Mo.
- Batte, Edward Guy*, Prof. Emeritus of Parasit. B.S., M.S., D.V.M., Tex. A & M Univ.
- Beatty, Kenneth Orion, Jr.*, R.J. Reynolds Industries Prof. Emeritus of Chem. Engr. B.S., M.S., Lehigh Univ.; Ph.D., Univ. of Mich.
- Behlow, Robert Frank*, Prof. Emeritus of Ani. Sci. D.V.M., Ohio State Univ.
- Bell, Norman Robert*, Assoc. Prof. Emeritus of Elect. & Comp. Engr. B.S., Lehigh Univ.; M.S., Cornell Univ.
- Bell, Thomas Alexander*, Prof. (USDA) Emeritus of Food Sci. B.S., Wofford Coll.; M.S., N.C. State Univ.
- Bennett, Landis Seawell*, Ext. Ed. Emeritus of Agri. Info. Serv. B.S., N.C. State Univ.; Ph.D., W. Va. Univ.
- Bennett, Roy Ray*, Ext. Prof. Emeritus of Crop Sci. B.S., N.C. State Univ.
- Bennett, Willard Harrison*, Burlington Prof. Emeritus of Phys. B.S., Ohio State Univ.; M.S., Univ. of Wis.; Ph.D., Univ. of Mich.
- Bireline, George Lee, Jr.*, Prof. Emeritus of Design. B.F.A., Bradley Univ.; M.A., Univ. of N.C. at Chapel Hill.
- Blake, Carl Thomas*, Ext. Prof. Emeritus of Crop Sci. B.S., N.C. State Univ.; Ph.D., Penn. State Univ.
- Blalock, Thomas Carlton*, Dir. Emeritus of Agri. Ext. Serv. & Ext. Prof. Emeritus of Ani. Sci. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of Wis.
- Blalock, Thomas Jacks*, Asst. Prof. Emeritus of Chem. B.S., Presbyterian Coll.; M.A., Univ. of N.C. at Chapel Hill.
- Block, William Joseph*, Prof. Emeritus of Pol. Sci. & Pub. Adm. B.S., E. Ill. State Coll.; M.A., Ph.D., Univ. of Ill.
- Blumer, Thomas Nelson*, Prof. Emeritus of Food Sci. B.S. Penn. State Coll.; Ph.D., Mich. State Coll.
- Boal, Robert Stuart*, Ext. Assoc. Prof. Emeritus of Econ. B.S., Penn. State Univ.; M.S., Cornell Univ.
- Bogdan, John Francis*, Albert G. Myers Prof. Emeritus of Text. B.T.E., Lowell Text. Inst.
- Bostian, Carey Hoyt*, Prof. Emeritus of Gen. A.B., Catawba Coll.; M.S., Ph.D., Univ. of Pitts.; D.Sc., (Hon.) Wake Forest Coll.; Catawba Coll.; D. Honoris Causa, Nat'l Univ. of Engr. (Peru).
- Bradford, Edward Hosmer*, Assoc. Prof. Emeritus of Text. Mgmt. & Tech. B.T.E., Lowell Text. Inst.
- Bredenberg, Paul Arnold*, Prof. Emeritus of Phil. B.A., Univ. of Penn.; Ph.D., Yale Univ.
- Bright, Richard*, Prof. Emeritus of Chem. Engr. B.S., M.S. State Univ. of Iowa.
- Brim, Charles Aloysius*, Prof. (USDA) Emeritus of Crop Sci. B.Sc., M.Sc., Ph.D., Univ. of Neb.
- Brooks, Robert Charles*, Prof. Emeritus of Econ. B.S., M.S., N.C. State Univ.; Ph.D., Duke Univ.
- Brown, Lois S.*, Ext. Assoc. Prof. Emeritus of Ext. Home Ec. B.S., W. Va. State Inst.; M.S., Univ. of Wis. at Madison; Ed.D., N.C. State Univ.
- Brown, Marvin L., Jr.*, Prof. Emeritus of Hist. A.B., Haverford Coll.; A.M., Ph.D., Univ. of Penn.
- Brown, Minnie M.*, Ext. Prof. Emeritus of Adult & Comm. Coll. Ed. & Home Econ. B.S., Bennett Coll.; M.S., Cornell Univ.
- Bryant, Charles Douglas*, Assoc. Prof. Emeritus of Agri. Ed. Prog. B.S., M.S., N.C. State Univ.; Ed.D., Mich. State Univ.
- Bryant, Ralph Clement*, Prof. Emeritus of For. B.S., M.F., Yale Univ.; Ph.D., Duke Univ.
- Buchanan, James Samuel*, Ext. Prof. Emeritus of Ani. Sci. B.S., Va. Polytech. Inst. & State Univ.
- Buckley, Katherine Isabelle*, Ext. Assoc. Prof. Emeritus of Home Econ. B.S., Madison Coll.; M.S., Univ. of N.C. at Greensboro.
- Bullock, Roberts Cozart*, Prof. Emeritus of Math. B.A., M.A., Univ. of N.C. at Chapel Hill; Ph.D., Univ. of Chicago.
- Burt, Millard Paylor*, Prof. Emeritus of Adult & Comm. Coll. Ed.A.B., Atlantic Christian Coll.; M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Burton, Ralph A.*, Prof. Emeritus of Mech. & Aero. Engr. B.S., M.S., Univ. of Ark.; Ph.D., Univ. of Tex.
- Caldwell, John Tyler*, Chan. Emeritus, NCSU & Prof. Emeritus of Pol. Sci. & Pub. Adm. B.S., Miss. State Coll.; A.M., Duke Univ.; M.A., Columbia Univ.; Ph.D., Princeton Univ.
- Campbell, Kenneth Stoddard*, Prof. Emeritus of Text. Chem. B.S., Bates Coll.; B.S., Clemson Coll.
- Cannon, Thomas Franklin*, Assoc. Prof. Emeritus of Hort. Sci. B.S., M.S., N.C. State Univ.; Ph.D., Ohio State Univ.
- Carpenter, William Lester*, Prof. Emeritus of Adult and Comm. Coll. Ed. & Agri. Comm. B.S., N.C. State Univ.; M.S., Univ. of Wis.; Ed.D., Fla. State Univ.
- Carson, Robert Gordon, Jr.*, Prof. Emeritus of Ind. Engr. B.S., Clemson Coll.; M.S., Ga. Inst. of Tech.; Ph.D., Univ. of Mich.
- Cates, David Marshall*, Prof. Emeritus of Text. Chem. B.S., M.S., N.C. State Univ.; M.A., Ph.D., Princeton Univ.

- Chaney, David Webb, Dean & Prof. Emeritus of Text. A.B., Swarthmore Coll.; M.S., Ph.D., Univ. of Penn.
- Chaplin, James F., Prof. (USDA) Emeritus of Crop Sci. & Gen. B.S., Clemson Univ.; M.S., Ph.D., N.C. State Univ.
- Christian, John Allen, Ext. Prof. Emeritus of Food Sci. B.S., M.S., Penn. State Univ.
- Clarkson, John Montgomery, Prof. Emeritus of Math. B.A., Wofford Coll.; M.A., Duke Univ.; Ph.D., Cornell Univ.
- Clayton, Carlyle Newton, Prof. Emeritus of Plant Path. B.S., Clemson Univ.; Ph.D., Univ. of Wis.
- Clayton, Maurice Hill, Prof. Emeritus of Mech. & Aero. Engr. B.S., Wake Forest Coll.; M.E., N.C. State Univ.; Ph.D., Va. Polytech. Inst. & State Univ.
- Cochran, Fred Derward, Prof. Emeritus of Hort. Sci. B.S., Clemson Coll.; M.S., La. State Univ.; Ph.D., Univ. of Calif. at Berkeley.
- Cofer, Eloise Snowden, Ext. Prof. Emeritus of Home Ec. & Food Sci. A.B., Marshall Coll.; M.S., Columbia Univ.; Ph.D., Univ. of Chicago.
- Collins, John Nolan, Ext. Prof. Emeritus of Soc. & Anth. B.S., M. Agri., N.C. State Univ.
- Cook, Hilliard Dunning, Asst. Prof. Emeritus of Pulp & Paper Tech. B.S., Mass. Inst. of Tech.
- Cooke, Henry Charles, Assoc. Prof. Emeritus of Math. B.S., M.S., N.C. State Univ.
- Cooper, William Chester, Ext. 4-H Spec. Emeritus in Agri. Ext. Serv. B.S., Hampton Inst.; M.S., Cornell Univ.
- Cope, Will Allen, Prof. (USDA) Emeritus of Crop Sci. B.S., M.S., Ala. Polytech. Inst.; Ph.D., N.C. State Univ.
- Corter, Harold Maxwell, Prof. Emeritus of Psych. B.S., State Teachers' Coll.; M.Ed., Ph.D., Penn. State Univ.
- Covington, Henry Metteaux, Ext. Prof. Emeritus of Hort. Sci. B.S., Clemson Coll.; M.S., La. State Univ.
- Coz, Joseph H., Prof. Emeritus of Design. B.F.A., John Herron Art School; M.F.A., Univ. of Iowa.
- Coz, Walter L., Jr., Assoc. Prof. Emeritus of Occup. Ed. B.S., M.A., E. Carolina Univ.; Ed.D., N.C. State Univ.
- Crouch, Henry Leland, Jr., Instr. Emeritus in Math. B.S., U.S. Mil. Acad.; M.A.T., Duke Univ.
- Crouse, Roy H., Ext. Asst. Prof. Emeritus of Agron. B.S., N.C. State Univ.
- Cummings, Ralph Waldo, Prof. Emeritus of Soil Sci. B.S., N.C. State Univ.; Ph.D., Ohio State Univ.
- Dalla-Pozza, Ada Braswell, Ext. Prof. Emeritus of Ext. Home Econ. B.S., Women's Coll., Univ. of N.C. at Greensboro; M.S., Univ. of Tenn.
- Dandridge, Edmund Pendleton, Jr., Assoc. Prof. Emeritus of Engl. A.B., Kenyon Coll.; M.A., Univ. of Mich.; Ph.D., Univ. of Va.
- Davis, David Edward, Prof. Emeritus of Zool. B.A., Swarthmore Coll.; M.S., Ph.D., Harvard Univ.
- Davis, Philip Harvey, Assoc. Prof. Emeritus of Engl. A.B., M.A., Miami Univ.
- Dawson, Cleburn Gilchrist, Asst. Prof. Emeritus of Soc. & Anth. B.S., M.Ed., Ph.D., N.C. State Univ.
- Dickens, Randolph Charles, Instr. Emeritus in Math. B.S., U.S. Mil. Acad.; M.A.T., Duke Univ.; Ed.D., N.C. State Univ.
- Dillard, Emmett Urcey, Assoc. Prof. Emeritus of Ani. Sci. B.S., Berea Coll.; M.S., N.C. State Univ.; Ph.D., Univ. of Mo.
- Doak, George Osmore, Prof. Emeritus of Chem. B.S. (Chem.), B.S. (Pharm.), Univ. of Saskatchewan (Canada); M.S., Ph.D., Univ. of Wis.
- Dobbins, Grover Cleatus, Dist. Ext. Chrmn. Emeritus of Agri. Ext. Serv. B.S., N.C. State Univ.
- Dobson, Samuel Hill, Ext. Prof. Emeritus of Crop Sci. B.S., M.S., N.C. State Univ.
- Dodson, John Dudley, Ext. Spec., Emeritus, Sch. of Agri. & Life Sci. B.S., M.A., N.C. State Univ.
- Donnelly, Marjorie M., Ext. Prof. Emeritus of Ext. Home Econ. B.S., Fla. State Coll. for Women; M.S., Univ. of Tenn.
- Doolittle, Jesse Seymour, Prof. Emeritus of Mech. Engr. B.S., Tufts Univ.; M.S., Penn. State Univ.
- Dotson, William Grady, Jr., Prof. Emeritus of Math. B.S., Wake Forest Coll.; M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Douglass, Ross Swarens, Ext. Assoc. Prof. Emeritus of For. B.S., N.C. State Univ.; M.F., Duke Univ.
- Drabick, Lawrence William, Prof. Emeritus of Soc. & Anth. B.S., M.S., Ph.D., Penn. State Univ.
- Duffield, John Warren, Prof. Emeritus of For. B.S., Cornell Univ.; M.F., Harvard Univ.; Ph.D., Univ. of Calif. at Berkeley.
- Easley, John Bynum, Assoc. Prof. Emeritus of Engl. B.A., M.A., Univ. of N.C. at Chapel Hill.
- Eckels, Arthur Raymond, Prof. Emeritus of Elect. & Comp. Engr. B.S.E.E., Univ. of Conn.; M.S., Harvard Univ.; D. Engr., Yale Univ.
- Edwards, Jennings Bryan, Jr., Assoc. Prof. Emeritus of Phys. Ed. B.S., N.C. State Univ.; M.A., Univ. of N.C. at Chapel Hill.
- Elliot, Robert Neal, Assoc. Prof. Emeritus of Hist. B.S., Appalachian State Teachers Coll.; M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Ellis, Don Edwin, Prof. Emeritus of Plant Path. B.Sc., B.A., Neb. Central Coll.; M.S., La. State Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- Ellis, Howard McDonald, Ext. Prof. Emeritus of Agri. Engr. B.S., N.C. State Univ.
- Emerson, Paul DeForest, Prof. Emeritus of Text. Engr. & Sci. B.S., Purdue Univ.
- Evans, James Brainerd, Prof. Emeritus of Microbiol. B.S., Houghton Coll.; Ph.D., Cornell Univ.
- Fadum, Ralph Eigil, Dean Emeritus of Sch. of Engr. & Prof. Emeritus of Civ. Engr. B.S.C.E., Univ. of Ill.; M.S.E., S.D., Harvard Univ.
- Ferguson, John Clyde, Ext. Assoc. Prof. Emeritus of Biol. & Agri. Engr. B.S., N.C. State Univ.
- Fitts, James Walter, Prof. Emeritus of Soil Sci. B.S., Neb. State Teachers Coll.; M.S., Univ. of Neb.; Ph.D., Iowa State Coll.
- Foil, John Edwin, Asst. Dir. Emeritus in the Agri. Ext. Serv. B.S., M.S., N.C. State Univ.
- Fore, Julian Mark, Prof. Emeritus of Biol. & Agri. Engr. B.Sc., Va. Polytech. Inst.; M.Sc., Purdue Univ.
- Fountain, Alvin Marcus, Prof. Emeritus of Engl. B.E., M.S., N.C. State Univ.; M.A., Columbia Univ.; Ph.D., Geo. Peabody Coll. for Teachers.
- Garcia, Bertram Howard, Jr., Prof. Emeritus of Mech. & Aero. Engr. B.S.M.E., M.S.M.E. Penn. State Univ.; Ph.D., Va. Polytech. Inst. & State Univ.
- Garmon, William Martin, Ext. Prof. Emeritus of 4-H & Youth Devel. B.S., N.C. State Univ.; M.S., Clemson College.
- George, James Dalton, Prof. Emeritus of Adult & Comm. Coll. Ed. B.S., Miss. State Univ.; M.S., N.C. State Univ. Ph.D., Fla. State Univ.
- Gerstel, Dan Ulrich, William Neal Reynolds Prof. Emeritus of Crop Sci. B.S., M.S., Ph.D., Univ. of Calif. at Berkeley.
- Gilbert, William Best, Prof. Emeritus of Crop Sci. B.S., Berea Coll.; M.S., Univ. of Ky.; Ph.D., N.C. State Univ.
- Giles, George Wallace, Prof. Emeritus of Biol. & Agri. Engr. B.S., Univ. of Neb.; M.S., Univ. of Mo.
- Gilliam, Henry C., Jr., Assoc. Prof. Emeritus of Econ. B.S., M.S., N.C. State Univ.; Ph.D., Clemson Univ.
- Glazener, Edward Walker, Dir. Emeritus, Acad. Aff., School of Agri. & Life Sci. & Prof. Emeritus of Poul. Sci. & Gen. B.S., N.C. State Univ.; M.S., Ph.D., Univ. of Md.
- Goetze, Alfred John, Prof. Emeritus of Elect. & Comp. Engr. B.S.E.E., Drexel Inst. of Tech.; M.S., N.C. State Univ.; Ph.D., Duke Univ.

Gonzalez, Alan A., Prof. Emeritus of For. Lang. & Lit., M.A., Edinburgh Univ. (Scotland); Ph.D., Johns Hopkins Univ.

Goode, Lemuel, Prof. Emeritus of Ani. Sci. B.S., M.S., W. Va. Univ.; Ph.D., Univ. of Fla.

Gragg, William Lee, Assoc. Prof. Emeritus of Adult & Comm. Coll. Ed. B.S., Indiana Univ.; M.S., Ph.D., Cornell Univ.

Grandage, Arnold H. E., Prof. Emeritus of Statistics. B.A., Lehigh Univ.; Ph.D., N.C. State Univ.

Greenlaw, Ralph Weller, Prof. Emeritus of Hist. A.B., Amherst Coll.; M.A., Ph.D., Princeton Univ.

Greenlee, Genevieve K., Ext. Spec. Emeritus of Housing & House Furn. B.S., Bennett Coll.; M.S., Cornell Univ.

Gregory, Walton Carlyle, William Neal Reynolds Prof. Emeritus of Crop Sci. B.A., Lynchburg Coll.; M.A., Ph.D., Univ. of Va.; D.Sc., Lynchburg Coll.

Grosch, Daniel Swartwood, Prof. Emeritus of Gen. B.S., Moravian Coll.; M.S., Lehigh Univ.; Ph.D., Univ. of Penn.

Grover, Elliott Brown, Abel C. Linberger Prof. Emeritus of Text. B.S., Mass. Inst. of Tech.

Guion, Thomas Hyman, Assoc. Prof. Emeritus of Text. Chem. B.S., Davidson Coll.; Ph.D., Univ. of N.C. at Chapel Hill.

Hader, Robert John, Prof. Emeritus of Stat. B.S., Univ. of Chicago; Ph.D., N.C. State Univ.

Hall, Ruth Badger, Asst. Prof. Emeritus of For. Lang. & Lit. B.A., Oberlin Coll.; M.A., Univ. of N.C. at Chapel Hill.

Hamme, John Valentine, Assoc. Prof. Emeritus of Mat. Engr. & Sci. B.S., N.C. State Univ.; M.S., Univ. of Utah; Ph.D., N.C. State Univ.

Hammon, Gordon A., Assoc. Prof. Emeritus of Rec. Res. Adm. B.S., N. Y. State Coll. of For. at Syracuse.

Hammond, Robert Holmes, Assoc. Prof. Emeritus of Engr. B.M.E., M.A., Fenn Col. (Cleveland State Univ.).

Hanson, Durwin Melford, Prof. Emeritus of Occup. Ed. B.S., M.S., Ph.D., Iowa State Coll.

Hanson, James William, Asst. Prof. Emeritus of Comp. Sci. B.S., U.S. Naval Acad.; M.A., Univ. of Mich.

Harder, John J., Assoc. Prof. Emeritus of Ind. Engr. Dipl. Ing., Technische Hochschule (Berlin, Germany); Dr. Ing., Technische Hochschule (Hanover).

Harrell, Cleon Wallace, Jr., Assoc. Prof. Emeritus of Econ. & Bus. B.S., M.A., Univ. of Va.

Harrington, Walter Joel, Prof. Emeritus of Math. B.A., M.A., Ph.D., Cornell Univ.

Harris, Harwell Hamilton, Prof. Emeritus of Arch.

Harris, James Ray, Ext. Prof. Emeritus of Poul. Sci. & Food Ani. & Equine Med. D.V.M., Auburn Univ.

Harris, John Henry, Ext. Prof. Emeritus of Hort. Sci. B.S., N.C. State Univ.

Harvey, Paul Henry, William Neal Reynolds Prof. Emeritus of Crop Sci. B.S., Univ. of Neb.; Ph.D., Iowa State Univ.

Harwood, Dewey G., Jr., Ext. Prof. Emeritus of Agr. Ext. Ser. B.S., M.S., N.C. State Univ.

Hassler, William Walton, Prof. Emeritus of Zool. B.S., M.S., Cornell Univ.; Ph.D., Univ. of Tenn.

Hawks, Stirling Norman, Jr., Ext. Prof. Emeritus of Crop Sci. B.S., N.C. State Univ.

Hayes, Arthur Courtney, Assoc. Prof. Emeritus of Text. Chem. Ph.B., Brown Univ.; M.S., N.C. State Univ.

Hayne, Don William, Prof. Emeritus of Stat. & Zool. A.B., Kalamazoo Coll.; M.A., Ph.D., Univ. of Mich.

Hebert, Teddy Theodore, Prof. Emeritus of Plant Path. B.S., Southwestern La. Inst.; M.S., La. State Univ.; Ph.D., N.C. State Univ.

Herman, Luther Russell, Asst. Prof. Emeritus of Elect. Engr. B.S., Lenoir Rhyne Coll.; M.S., N.C. State Univ.

Highfill, William Lawrence, Assoc. Prof. Emeritus of Rel. B.A., Wake Forest Coll.; B.D., S. Baptist Theol. Sem.; Ph.D., Duke Univ.

Hines, Thomas Ira, Prof. Emeritus of Rec. Res. Adm. B.S., N.C. State Univ.; M.A., Univ. of N.C. at Chapel Hill.

Hinson, Thelma Lee, Ext. Prof. Emeritus of Home Ec. B.S., E. Carolina Univ.; M.S.H.E., Ph.D., Univ. of N.C. at Greensboro.

Hoadley, George Burnham, Prof. Emeritus of Elect. Engr. B.S., Swarthmore Coll.; M.Sc., D.Sc., Mass. Inst. of Tech.

Hobbs, LaFloyd Hueston, Ext. Assoc. Prof. Emeritus of Wood & Paper Sci. B.S., N.C. State Univ.

Hoch, Arthur Mabon, Assoc. Prof. Emeritus of Phys. Ed. B.S., Wake Forest Coll.; M.Ed., Univ. of N.C. at Chapel Hill.

Homme, Henry Alfred, Ext. Assoc. Prof. Emeritus of Econ. B.A., Augustana Coll.; M.A., Mich. State Univ.

Honeycutt, Ruth Ball, Asst. Prof. Emeritus of Math. A.B., Wellesley Coll.; M.A., Duke Univ.

Hoover, Maurice William, Prof. Emeritus of Food Sci. B.S.A., M.S., Ph.D., Univ. of Fla.

Hopke, William Ernest, Prof. Emeritus of Couns. Ed. B.A., M.A., N.Y. State Teachers Coll.; Ed.D., Teachers Coll., Columbia Univ.

Howell, Ezra Lewis, Prof. Emeritus of Biol. & Agri. Engr. B.S., M.Ed., N.C. State Univ.

Howells, David Hewes, Prof. Emeritus of Biol. & Agri. Engr. B.S., Ore. State Univ.; M.S., Mass. Inst. of Tech.

Hughes, George Roscoe, Ext. Prof. Emeritus of Hort. Sci. B.S., M.S., N.C. State Univ.

Hyatt, George, Jr., Dir. Emeritus of Agri. Ext. Serv. and Prof. Emeritus of Ani. Sci. B.S., Mich. State Coll.; M.S., Rutgers Univ.; Ph.D., Univ. of Wis.

Jenkins, John Mitchell, Jr., Prof. Emeritus of Hort. Sci. B.S., Clemson Coll.; M.S., La. State Univ.; Ph.D., Univ. of Minn.

Johnson, Joseph Clyde, Prof. Emeritus of Psych. B.S., Troy State Coll.; M.A., Ed.D., Geo. Peabody Coll. for Teachers.

Johnston, William Rodgers, Asst. Prof. Emeritus of Chem. B.S., M.S., Univ. of N.C. at Chapel Hill.

Jones, Edgar Walton, Prof. Emeritus of Econ. & Bus. B.S., M.S., Clemson Coll.; Ph.D., N.C. State Univ.

Jones, Edward M., Ext. Assoc. Prof. Emeritus of For. B.S., N.C. State Univ.; M.S., La. Polytech. Inst.

Jones, George Denver, Ext. Prof. Emeritus of Entom. B.A., M.S., Univ. of Mo.

Jones, Guy Langston, Ext. Prof. Emeritus of Crop Sci. & Soil Sci. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of Minn.

Jones, Ivan Dunlavy, Prof. Emeritus of Food Sci. A.B., Neb. Wesleyan Univ.; Ph.D., Univ. of Minn.

Jones, John Carlton, Prof. Emeritus of For. B.S., N.C. State Univ.; M.F., Duke Univ.

Kamphoefner, Henry Leveke, Dean Emeritus of the Sch. of Design & Prof. Emeritus of Arch. B.S. (Arch.), Univ. of Ill.; M.S. (Arch.), Columbia Univ.

Kashef, Abdel-Aziz Ismail, Prof. Emeritus of Civ. Engr. B.S., M.S., Cairo Univ. (Egypt); Ph.D., Purdue Univ.

Keating, Harold, Assoc. Prof. Emeritus of Phys. Ed. B.S., M.Ed., Springfield Coll.

Keller, Walter McClellan, Ext. Prof. Emeritus of For. B.S., N.C. State Univ.; M.F., Duke Univ.

Kincheloe, Henderson Grady, Prof. Emeritus of Engl. B.A., Univ. of Rich.; M.A., Harvard Univ.; Ph.D., Duke Univ.

King, Cyrus Baldwin, Lib. & Asst. Dir. Emeritus, D.H. Hill Library. A.B., Univ. of N.C. at Chapel Hill; M.A., Univ. of Ky.

Kirkland, James Bryant, Dean & Prof. Emeritus of Ed. B.S.Ag., M.S., Univ. of Tenn.; Ph.D., Ohio State Univ.

Klibbe, James Warner, Assoc. Prof. Emeritus of Text. Mgmt. & Tech. B.S., N.C. State Univ.

- Knight, Kenneth Lee*, Prof. Emeritus of Entom. B.Ed., Ill. State Normal Univ.; M.S., Ph.D., Univ. of Ill.
- Knowles, Malcolm Shepherd*, Prof. Emeritus of Adult & Comm. Coll. Ed. A.B., Harvard Univ.; M.A., Ph.D., Univ. of Chicago.
- Kolb, Charles Frederick*, Asst. Prof. Emeritus of Hist. A.B., Drury Coll.; M.A., Univ. of Ky.
- Kolbe, Melvin Henry*, Ext. Prof. Emeritus of Hort. Sci. B.S., Ohio State Univ.; M.S., W.Va. Univ.
- Koonce, Benjamin Granade, Jr.*, Prof. Emeritus of Engl. A.B., M.A., Univ. of N.C. at Chapel Hill; Ph.D., Princeton Univ.
- Lambert, John Ralph, Jr.*, Prof. Emeritus of Univ. Stud. A.B., W. Md. Coll.; M.A., Ph.D., Princeton Univ.
- Lammi, Joe Oscar*, Prof. Emeritus of For. B.S., M.S., Ore. State Univ.; Ph.D., Univ. of Calif. at Berkeley.
- Lampe, John Harold*, Dean Emeritus of the Sch. of Engr. & Prof. Emeritus of Elect. & Comp. Engr. B.S., M.S., D.Engr., Johns Hopkins Univ.
- Landes, Chester Grey*, Assoc. Prof. Emeritus of Wood & Paper Sci. B.S.Ch.E., Ohio State Univ.
- Langfelder, Leonard Jay*, Prof. Emeritus of Mar., Earth & Atmos. Sci., & Prof. of Civ. Engr. B.C.E., M.S.E., Univ. of Fla.; Ph.D., Univ. of Ill.
- Langley, Lorna White*, Ext. State Agent Emeritus of Home Ec. in Agri. Ext. Serv. M.S., Iowa State Coll.
- Leatherwood, James Murray*, Prof. Emeritus of Ani. Sci. B.S., Berea Coll.; M.S., Ph.D., N.C. State Univ.
- Lee, William D.*, Assoc. Prof. Emeritus of Agron. B.S., N.C. State Univ.
- Legates, J. E.*, Dean Emeritus of the Sch. of Agri. & Life Sci. B.S., Univ. of Del.; M.S., Ph.D., Iowa State Univ. Wm. Neal Reynolds Prof. Emeritus of Ani. Sci. & Gen.
- Leith, Carlton J.*, Prof. Emeritus of Geo. Sci. B.A., M.A., Univ. of Wis.; Ph.D., Univ. of Calif. at Berkeley.
- Leonhardt, William Russell*, Assoc. Prof. Emeritus of Phys. Ed. B.S., Springfield Coll.; M.S., Univ. of Ill.
- Levine, Jack*, Prof. Emeritus of Math. B.A., Univ. of Calif. at L.A.; Ph.D., Princeton Univ.
- Lewis, Charles Frederick*, Asst. Prof. Emeritus of Math. B.S., Tenn. State Coll.; M.A., Geo. Peabody Coll. for Teachers.
- Lewis, Paul Edwin*, Prof. Emeritus of Math. B.S., Northwestern Okla. Coll.; M.S., Okla. State Univ.; Ph.D., Univ. of Ill.
- Little, Charles Howie, Jr.*, Assoc. Prof. Emeritus of Math. B.A., Davidson Coll.; M.A., Univ. of N.C. at Chapel Hill.
- Little, Lillie B.*, Dist. Home Ec. Ext. Agent Emeritus in Agri. Ext. Serv. B.S., Univ. of N.C. at Greensboro.
- Llewellyn, Robert Warren*, Prof. Emeritus of Ind. Engr. B.S.E.E., Union Coll.; M.S.I.E., Purdue Univ.
- Loeppert, Richard Henry*, Prof. Emeritus of Chem. B.S., Northwestern Univ.; Ph.D., Univ. of Minn.
- Lovorn, Roy Lee*, Dir. Emeritus of Res. for School of Agri. & Life Sci. & Prof. Emeritus of Crop Sci. B.S., Auburn Univ.; M.S., Univ. of Mo.; Ph.D., Univ. of Wis.
- Lucas, George B.*, Prof. Emeritus of Plant Path. B.S., Penn. State Coll.; M.S., Ph.D., La. State Univ.
- Lynn, Joseph Thomas*, Prof. Emeritus of Phys. B.A., Vanderbilt Univ.; M.S., Ohio State Univ.
- MacKerracher, Robert Archibald*, Asst. Prof. Emeritus of Math. Grad., U.S. Naval Acad.; M.A., Univ. of Va.
- Magill, John William*, Assoc. Prof. Emeritus of Psych. B.S., Pa. State Teachers' Coll.; Ph.D., Univ. of Pitt.
- Magor, James Kitchener*, Prof. Emeritus of Mat. Engr. & Sci. B.S., Univ. of Toronto (Canada); M.S., Ph.D., Penn State Univ.
- Mann, Carroll Lamb, Jr.*, Prof. Emeritus of Civ. Engr. B.S.C.E., N.C. State Univ.; C.E., Princeton Univ.
- Mann, Helen O.*, Asst. to the Chan. Emeritus. A.A., Lees-McRae Junior Coll.; Commercial, Flora MacDonald Coll.
- Mann, Thurston Jefferson*, Prof. Emeritus of Gen. & Crop Sci. B.S., M.S., N.C. State Univ.; Ph.D., Cornell Univ.
- Manning, Edward George*, Assoc. Prof. Emeritus of Elect. & Comp. Engr. B.S.E.E., Lehigh Univ.; M.S., N.C. State Univ.
- Manring, Edward Raymond*, Prof. Emeritus of Phys. B.S., M.S., Ph.D., Ohio State Univ.
- Marshall, Roger Powell*, Prof. Emeritus of Engl. B.A., Wake Forest Coll.; M.S., N.C. State Univ.; M.A., Columbia Univ.
- Martin, David Hamilton*, Assoc. Prof. Emeritus of Phys. B.S., Presbyterian Coll.; M.S., Univ. of Wis.
- Martin, Grady Allen*, Ext. Prof. Emeritus of Poul. Sci. B.S., M.S., N.C. State Univ.; Ph.D., Purdue Univ.
- Mason, David Dickinson*, Prof. Emeritus of Stat. B.A., King Coll.; M.S., Va. Polytech. Inst. & State Univ.; Ph.D., N.C. State Univ.
- Matthews, Joseph Carson, Jr.*, Asst. Prof. Emeritus of Econ. B.S. (in Chem.), B.S. (in Ag.Ec.), M.S., Ph.D., N.C. State Univ.
- McCutchen, Kathleen Anderton*, Asst. Prof. Emeritus of Ed. B.A., Randolph-Macon Woman's Coll.; M.A., Columbia Univ. Teachers' Coll.
- McGlamery, Edith Barrier*, Spec. Emeritus in Housing & House Furn. in the Agri. Ext. Serv. B.S., Women's Coll., Univ. of N.C. at Greensboro.
- McNeill, John Joseph*, Assoc. Prof. Emeritus of Ani. Sci. B.S., M.S., Ph.D., Univ. of Md.
- McVay, Francis Edward*, Prof. Emeritus of Stat. B.S., Univ. of R.I.; M.S., N.C. State Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- Menius, Arthur Clayton, Jr.*, Dean Emeritus of the Sch. of Phys. & Math. Sci. & Prof. Emeritus of Phys. A.B., Catawba Coll.; Ph.D., Univ. of N.C. at Chapel Hill.
- Mettler, Lawrence Eugene*, Prof. Emeritus of Gen. A.B., Miami Univ.; M.S., Univ. of Ky.; Ph.D., Univ. of Tex.
- Middleton, Henry Moore, Jr.*, Asst. Prof. Emeritus of Text. Mat. & Mgmt. B.S., N.C. State Univ.
- Middleton, Joseph Leonard*, Assoc. Prof. Emeritus of Phil. & Rel. B.A., Wake Forest Coll.; B.D., Crozer Theol. Sem.; M.A., Columbia Univ.
- Miller, Howard George*, Prof. Emeritus of Psych. B.S., N.Y. State Coll. for Teachers; M.A., Ohio State Univ.; Ph.D., Penn. State Univ.
- Miller, Latham Lee*, Assoc. Prof. Emeritus of Rec. Res. Adm. B.A., Wake Forest Coll.; M.A., Univ. of N.C. at Chapel Hill.
- Miller, Norman C., Jr.*, Ext. Prof. Emeritus of Food Sci. B.S., M.S., Penn. State Univ.
- Miller, Texton Robert*, Assoc. Prof. Emeritus of Agri. Ed. B.S., M.A., Mich. State Univ.; Ph.D., Ohio State Univ.
- Miller, William Dykstra*, Prof. Emeritus of For. Mgmt. B.A., Reed Coll.; M.F., Ph.D., Yale Univ.
- Mills, William Clearon*, Ext. Prof. Emeritus of Poul. Sci. B.S., N.C. State Univ.; M.S., Ph.D., Mich. State Univ.
- Mistic, Walter Joseph, Jr.*, Prof. Emeritus of Entom. B.S., La. State Univ.; M.S., Ph.D., Tex. A & M Univ.
- Monroe, Robert James*, Prof. Emeritus of Stat. & Biomat. B.S., Iowa State Coll.; Ph.D., N.C. State Univ.
- Moore, Frank Harper*, Prof. Emeritus of Engl. B.A., Univ. of Fla.; M.A., Ph.D., Univ. of N.C.
- Moore, Pauline E.*, Ext. Asst. Prof. Emeritus of 4-H & Youth Devel. B.S., Bennett Coll.; M.Ed., N.C. State Univ.
- Moore, Robert Parker*, Prof. Emeritus of Crop Sci. B.S., Okla. State Univ.; M.S., Iowa State Univ.; Ph.D., Ohio State Univ.
- Morehead, Charles Galloway*, Prof. Emeritus of Guid. & Pers. Serv. A.B., Hendrix Coll.; M.A., Duke Univ.; Ed.M., Ed.D., Univ. of Kan.

- Morris, Thomas Buie*, Ext. Prof. Emeritus of Poul. Sci. B.S.A., M.S.A., Univ. of Ga.
- Moser, William Edwin*, Assoc. Prof. Emeritus of Text. Mat. & Mgmt. B.S., N.C. State Univ.
- Murray, Raymond LeRoy*, Burlington Prof. Emeritus of Phys. B.S., M.A., Univ. of Neb.; Ph.D., Univ. of Tenn.
- Myers, Richard Monier*, Prof. Emeritus of Ani. Sci. B.S., M.S., Penn. State Univ.
- Nahikien, Howard Movess*, Prof. Emeritus of Math. B.A., M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Nelson, Elzie Kathleen*, Ext. Assoc. Prof. Emeritus of Ext. Home Econ. B.S., Furman Univ.; M.Ed., N.C. State Univ.
- Nerden, Joseph Taft*, Prof. Emeritus of Ind. Ed. B.S., Central Conn. State Coll.; M.A., Ph.D., Yale Univ.
- Nichols, Thomas Everett, Jr.*, Philip Morris Prof. Emeritus of Econ. B.S., M.S., N.C. State Univ.; Ph.D., Duke Univ.
- Nielsen, Lowell Wendell*, Prof. Emeritus of Plant Path. B.S., M.S., Utah State Agri. Coll.; Ph.D., Cornell Univ.
- Noggle, Glenn Ray*, Prof. Emeritus of Bot. A.B., Miami Univ.; M.S., Ph.D., Univ. of Ill.
- Nolstad, Arnold Ragnwald*, Assoc. Prof. Emeritus of Math. B.A., Luther Coll.; M.A., Ph.D., Univ. of Pitt.
- Nunnally, Stephens Watson*, Prof. Emeritus of Civ. Engr. B.S., U.S. Mil. Acad.; M.S., Ph.D., Northwestern Univ.
- Nusbaum, Charles Joseph*, Wm. Neal Reynolds Prof. Emeritus of Plant Path. B.S., Ore. State Coll.; M.S., Ph.D., Univ. of Wis.
- Oliver, George Motley*, Instr. Emeritus in Chem. A.B., M.S., Univ. of N.C. at Chapel Hill.
- Olsen, Bernard Martin*, Prof. Emeritus of Econ. & Bus. A.B., M.A., Ph.D., Univ. of Chicago.
- Olson, Delmar Walter*, Prof. Emeritus of Ind. & Tech. Ed. B.S., Iowa State Univ.; M.A., Ph.D., Ohio State Univ.
- Opp, Edwin Hugh*, Assoc. Prof. Emeritus of Engl. B.L., Northwestern Univ.; M.A., Univ. of Pitt.
- Pardue, James Edwin*, Assoc. Prof. Emeritus of Text. Mat. & Mgmt. B.S., N.C. State Univ.
- Park, Hubert Vern*, Prof. Emeritus of Math. B.A., Lenoir Rhyne Coll.; M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Parker, John Mason, III*, Prof. Emeritus of Geosci. B.A., M.A., Ph.D., Cornell Univ.
- Parsons, Guy Sheridan*, Ext. Prof. Emeritus of Animal Sci. B.S., M.S., W. Va. Univ.
- Pate, Rudolph*, Vice-Chan. Emeritus for Found. & Univ. Rel. B.S., N.C. State Univ.
- Patterson, James William*, Ext. Prof. Emeritus of Ani. Sci. B.S., M.S., N.C. State Univ.; Ph.D., Va. Polytech. Inst. & State Univ.
- Patterson, Josephine S. W.*, Ext. Assoc. Prof. Emeritus of Ext. Home Ec. B.S., N.C. A & T Coll.; M.Ed., N.C. State Univ.
- Paulson, Jehu Dewitt*, Prof. Emeritus of Drawing. B.F.A., Yale Univ.
- Peck, John Gregory*, Assoc. Prof. Emeritus of Soc. & Anth. A.B., Univ. of Chicago; M.A., Wayne State Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- Perry, Astor*, Ext. Prof. Emeritus of Crop Sci. B.S., M.S., N.C. State Univ.
- Peterson, Wilbur Carroll*, Assoc. Prof. Emeritus of Elect. Engr. B.S.E.E., Univ. of Minn.; M.S., Mich. State Univ.; Ph.D., Northwestern Univ.
- Phillips, Lyle Llewellyn*, Prof. Emeritus of Crop Sci. & Gen. B.A., Univ. of Redlands; M.A., Claremont Coll.; Ph.D., Univ. of Wash.
- Pitts, M. Henry*, Assoc. Prof. Emeritus of Psych. A.B., Univ. of Ill. at Urbana; A.M., Ph.D., Univ. of Chicago.
- Poland, George Waverly*, Prof. Emeritus of For. Lang. & Lit. B.A., Coll. of William & Mary; M.A., Brown Univ.; Ph.D., Univ. of N.C. at Chapel Hill; Dipl., Univ. de Salamanca.
- Pope, Daniel Townsend*, Res. Prof. Emeritus of Hort. Sci. B.S., Clemson A & M Coll.; M.S., La. State Univ.; Ph.D., Cornell Univ.
- Porter, Joseph Alexander*, Prof. Emeritus of Text. Mat. & Mgmt. B.S., M.S., N.C. State Univ.
- Porterfield, Ira Deward*, Prof. Emeritus of Ani. Sci. B.S., Univ. of Md.; M.S., W. Va. Univ.; Ph.D., Univ. of Minn.
- Preston, Richard Joseph*, Dean Emeritus of the Sch. of For. Res. & Prof. Emeritus of For. B.A., M.S.F., Ph.D., Univ. of Mich.
- Pritchard, Iola Florence*, Spec. Emeritus of Food Conserv. & Mktg. A.B., E. Carolina Coll.
- Pugh, Charles Ray*, Prof. Emeritus of Econ. & Bus. B.S., M.S., N.C. State Univ.; Ph.D., Purdue Univ.
- Purcell, Albert Ernest*, Prof. (USDA) Emeritus of Food Sci. B.S., Brigham Young Univ.; M.S., Ph.D., Purdue Univ.
- Quay, Thomas Lavelle*, Prof. Emeritus of Zool. B.S., Univ. of Ark.; M.S., Ph.D., N.C. State Univ.
- Querry, John William*, Assoc. Prof. Emeritus of Math. B.S., Northwest Mo. State Coll.; M.S., Ph.D., State Univ. of Iowa.
- Raab, Kenneth Dale*, Assoc. Dean Emeritus of Stud. Aff. A.B., M.A., Univ. of Ill.
- Rabb, Robert Lamar*, Wm. Neal Reynolds Prof. Emeritus of Entom. B.S., M.S., Ph.D., N.C. State Univ.
- Rankin, William Houston*, Assoc. Prof. Emeritus of Soil Sci. B.S., M.S., N.C. State Univ.
- Rawls, Horace Darr*, Prof. Emeritus of Soc. & Anth. B.S., M.S., N.C. State Univ.; Ph.D., Duke Univ.
- Rawls, Rachel F.*, Assoc. Prof. Emeritus of Psych. A.B., Meredith Coll.; M.S., Ph.D., N.C. State Univ.
- Reid, William Walton*, Ext. Assoc. Prof. Emeritus of Hort. Sci. B.S., N.C. State Univ.
- Reid, Willis Alton*, Prof. Emeritus of Chem. B.S., Wake Forest Coll.; Ph.D., Univ. of Wis.
- Rice, John Carl*, Prof. Emeritus of Crop Sci. B.S., M.S., Ala. Polytech. Inst.; Ph.D., Miss. State Univ.
- Rigney, Jackson Ashcraft*, Prof. Emeritus of Stat. & Dean Emeritus for Internat'l Prog. B.S., N. Mex. State Coll.; M.S., Iowa State Coll.
- Roberts, William Milner*, Prof. Emeritus of Food Sci. B.S.A., Univ. of Tenn.; M.S., Ph.D., Univ. of Minn.
- Robertson, Robert LaFon*, Ext. Prof. Emeritus of Entom. B.S., M.S., Auburn Univ.
- Robinson, Denver Devon*, Ext. Assoc. Prof. Emeritus of Econ. & Bus. B.S., M.S., N.C. State Univ.
- Rochow, Theodore George*, Assoc. Prof. Emeritus of Text. Tech. B.Chem., Ph.D., Cornell Univ.
- Rogers, Charles Nicholas*, Assoc. Prof. Emeritus of Wood & Paper Sci. B.S., N.C. State Univ.
- Rogers, Lyle Barton*, Assoc. Dean Emeritus of Stud. Aff. B.A., Dakota Wesleyan Univ.; M.S., Univ. of Idaho; Ph.D., Columbia Univ.
- Ross, John Paul*, Prof. (USDA) Emeritus of Plant Path. B.S., Univ. of Vt.; Ph.D., Cornell Univ.
- Rozier, Justine Jones*, Ext. Prof. Emeritus of Ext. Home Ec. B.S., Berea Coll.; M.S., Ph.D., Purdue Univ.
- Russell, Idonna Emmons*, Assoc. Prof. Emeritus of Soc. & Anth. B.S., Ohio State Univ.; M.S.W., Tulane Univ.
- Rust, Paul James*, Assoc. Prof. Emeritus of Ed. B.A., M.A., Univ. of Idaho; Ph.D., Univ. of Wash.
- Rutherford, Henry Ames*, Cone Mills Prof. Emeritus of Text. B.S., Davis & Elkins Coll.; M.A., Geo. Wash. Univ.
- Sasser, Joseph Neal*, Prof. Emeritus of Plant Path. B.S., M.S., N.C. State Univ.; Ph.D., Univ. of Md.
- Sasser, Leonard Ralph*, Dist. Ext. Chrmn. Emeritus in Agri. Ext. Serv. B.S., M.Ed., N.C. State Univ.

- Saucier, Walter Joseph*, Prof. Emeritus of Meteorol. B.S., Univ. of Southwestern La.; S.M., Ph.D., Univ. of Chicago.
- Scarborough, Clarence Cayce*, Prof. Emeritus of Agri. Ed. B.S., M.S., Ala. Polytech. Inst.; Ed.M., Ed.D., Univ. of Ill.
- Scofield, Herbert Temple*, Prof. Emeritus of Bot. A.B., Ph.D., Cornell Univ.
- Seagraves, James Arthur*, Prof. Emeritus of Econ., B.A., Reed Coll.; M.S., Ph.D., Iowa State Coll.
- Seagraves, Wayland Pritchard*, Assoc. Prof. Emeritus of Elect. Engr. B.S., M.S., N.C. State Univ.
- Seegers, Louis Walter*, Prof. Emeritus of Hist. B.A., Muhlenberg Coll.; M.A., Univ. of Penn.
- Seely, John Frank*, Prof. Emeritus of Chem. Engr. B.S.Ch.E., M.S.Ch.E., N.C. State Univ.
- Shannon, Henry Anthony*, Assoc. Prof. Emeritus of Math. & Sci. Ed. B.S., Appalachian State Teachers' Coll.; Ed.M., Univ. of Mo.
- Shaw, Morton R.*, Prof. Emeritus of Text. B.E., Dr. Engr., Johns Hopkins Univ.
- Shea, Wilfred Michael*, Asst. Prof. Emeritus of Phys. Ed. B.S., N.C. State Univ.; M.Ed., Univ. of N.C. at Chapel Hill.
- Shelley, Alfred Bernard Rowland*, Assoc. Prof. Emeritus of Engl. B.S., Tufts Univ.; M.A., Harvard Univ.
- Shelton, Sherman Norman*, Dist. Prog. Ldr. Emeritus in the N.C. Agri. Ext. Serv. B.S., Hampton Inst.; M.Ed., N.C. State Univ.
- Shinn, William Edward*, Chester H. Roth Prof. Emeritus of Knitting Tech. B.S., M.S., N.C. State Univ.
- Shoffner, Robert Worth*, Dir. Emeritus of the N.C. Agri. Ext. Serv. B.S., N.C. State.
- Shore, Thomas Clinard, Jr.*, Asst. Prof. Emeritus of Ind. & Tech. Ed. B.S., Wake Forest Univ.; B.S., M.I.A., N.C. State Univ.; Ed.D., Univ. of Md.
- Simmons, Richard Lee*, Prof. Emeritus of Econ. B.S., M.S., Kan. State Coll.; Ph.D., Univ. of Calif. at Berkeley.
- Smallwood, Charles, Jr.*, Prof. Emeritus of Civ. Engr. B.S., Case Inst. of Tech.; M.S., Harvard Univ.
- Smaltz, Elizabeth Ann*, Asst. Prof. Emeritus of Phys. Ed. B.S., Penn. State Univ.; M.Ed., N.C. State Univ.
- Smith, Clyde Fuhrman*, Prof. Emeritus of Entom. B.S., M.S., Utah Agri. Coll.; Ph.D., Ohio State Univ.
- Smith, Farmer Sterling*, Assoc. Prof. Emeritus of Ind. & Tech. Ed. B.S., N.C. State Univ.; M.A., Univ. of N.C. at Chapel Hill; Ed.D., N.C. State Univ.
- Smith, Frank Houston*, Prof. Emeritus of Ani. Sci. B.S., Davidson Coll.; M.S., N.C. State Univ.
- Smith, Henry Brower*, Prof. Emeritus of Chem. Eng. & Dean Emeritus for Univ. Res. B.S.Ch.E., N.C. State Univ.; M.S., Va. Polytech. Inst. & State Univ.; Ph.D., Univ. of Cinn.
- Smith, William Edward*, Asst. Prof. Emeritus of Text. B.S., N.C. State Univ.
- Smith, William Edward*, Prof. Emeritus of Rec. Res. Adm. B.S., W. Carolina Teachers' Coll.; M.A., Univ. of N.C. at Chapel Hill; Ed.D., Geo. Peabody Coll.
- Soz, Jason Loy, Jr.*, Asst. Prof. Emeritus of Math. B.S., M.S., Ph.D., N.C. State Univ.
- Speck, Marvin Luther*, Wm. Neal Reynolds Prof. Emeritus of Food Sci. & Microbiol. B.S., M.S., Univ. of Md.; Ph.D., Cornell Univ.
- Speece, Herbert Elvin*, Prof. Emeritus of Math. & Sci. Ed. B.A., York Coll.; M.S., N.C. State Univ.; M.A., Tex. Christian Univ.; Ph.D., Univ. of N.C. at Chapel Hill.
- Speidel, George S., Jr.*, Asst. Prof. Emeritus of Math. B.S., U.S. Mil. Acad.; M.A.T., Duke Univ.
- Stallings, Ernest M.*, Ext. Asst. Prof. Emeritus of Econ. B.S., M.S., N.C. State Univ.
- Stam, Ephraim*, Prof. Emeritus of Nucl. Engr. B.Sc., Univ. of London; M.S., Ph.D., Va. Poly. Inst. & State Univ.
- Stamm, Alfred J.*, Reuben B. Robertson Prof. Emeritus of Wood Prod. B.S., Calif. Inst. of Tech.; M.S., Ph.D., Univ. of Wis.
- Stanton, William McKinnon*, Ext. Assoc. Prof. Emeritus of For. B.S., M.S., N.C. State Univ.
- Steel, Robert George Douglas*, Prof. Emeritus of Statistics. B.A., B.S., Mt. Allison Univ.; M.S., Acadia Univ.; Ph.D., Iowa State Univ.
- Stevenson, William Damon, Jr.*, Prof. Emeritus of Elect. Engr. B.S.E., Princeton Univ.; B.S.E.E., Carnegie Inst. of Tech; M.S., Univ. of Mich.
- Stoops, Robert Franklin*, Prof. Emeritus of Mat. Sci. B.S., N.C. State Univ.; M.S., Ph.D., Ohio State Univ.
- Stott, Charles Carmen*, Assoc. Prof. Emeritus of Rec. Res. Adm. B.S., N.C. State Univ.; M.S., Indiana Univ.
- Stuart, Archie David*, Ext. Prof. Emeritus of Crop Sci. B.S., M.S., N.C. State Univ.
- Stuart, Duncan Robert*, Prof. Emeritus of Design.
- Sutherland, Joseph Gwyn*, Prof. (USDA) Emeritus of Econ. B.S., Appalachian State Teachers' Coll.; Ph.D., N.C. State Univ.
- Sutton, Paul Porter*, Prof. Emeritus of Chem. Ph.D., Johns Hopkins Univ.
- Talley, Banks Cooper, Jr.*, Vice-Chancellor Emeritus, Div. of Stud. Aff. & Assoc. Prof. Emeritus of Couns. Ed. A.B., M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- Taylor, Glenn Roy*, Assoc. Prof. Emeritus of Civ. Engr. B.S., Va. Mil. Inst.; M.S., Mo. School of Mines & Metallurgy.
- Thompson, Donald Lorraine*, Prof. (USDA) Emeritus of Crop Sci. B.S., M.S., S. Dakota State Coll.; Ph.D., Iowa State Coll.
- Thompson, Oliver George*, Asst. Prof. Emeritus of Econ. B.A., Wofford Coll.; M.A., Wake Forest Coll.
- Thompson, P. Paul*, Ext. Assoc. Prof. Emeritus of Soc. & Anth. B.S., Hampton Inst.; M.S., N.C. A&T State Univ.
- Thurlow, Edwin Gilbert*, Prof. Emeritus of Land. Arch. B.S., N.C. State Univ.; M.L.A., Harvard Univ.
- Tischer, Frederick Joseph*, Prof. Emeritus of Elect. & Comp. Engr. M.S., Ph.D., Univ. of Prague
- Todd, Furney Albert*, Ext. Prof. Emeritus of Plant Path. & Philip Morris Ext. Spec. Emeritus. B.S., N.C. State Univ.
- Toomey, Walter Glenn*, Ext. Assoc. Prof. Emeritus of Crop Science. B.S., Clemson Coll.
- Toussaint, William Douglas*, Prof. Emeritus of Econ. & Bus. B.S., N. Dakota Agri. Coll.; M.S., Ph.D., Iowa State Coll.
- Tucker, George Eugene*, Asst. Prof. Emeritus of Ind. Engr. B.S.M.E., Ala. Polytech. Inst.; M.S., N.C. State Univ.
- Tucker, Harry, Jr.*, Assoc. Prof. Emeritus of For. Lang. & Lit. B.A., M.A., Univ. of N.C. at Chapel Hill; Ph.D., Ohio State Univ.
- Ulberg, Lester Curtiss*, Wm. Neal Reynolds Prof. Emeritus of Ani. Sci. B.S., M.S., Ph.D., Univ. of Wis.
- Uyanik, Mehmet Ensar*, Prof. Emeritus of Civ. Engr. B.S.C.E., M.S., Ph.D., Univ. of Ill.
- Voland, Maurice Earl*, Prof. Emeritus of Soc. & Anth. B.S., M.S., Iowa State Univ.; Ph.D., Mich. State Univ.
- Wagner, Frances Jordan*, Ext. Prof. Emeritus of Ext. Home Ec.; B.S.H.E., Univ. of N.C. at Greensboro; M.S.H.E., Ohio State Univ.; Ph.D., Univ. of Fla.
- Wagoner, Fred H.*, Ext. Asst. Prof. Emeritus of 4-H & Youth Develop., B.S., N.C. State Univ.
- Walser, Richard Gaither*, Prof. Emeritus of Engl. B.A., M.A., Univ. of N.C. at Chapel Hill.
- Waltner, Arthur Walter*, Prof. Emeritus of Phys. B.A., Bethel Coll.; M.S., Kan. State Coll.; Ph.D., Univ. of N.C. at Chapel Hill.
- Ward, Thomas Marsh*, Assoc. Prof. Emeritus of Chem. A.B., Univ. of N.C. at Chapel Hill; Ph.D., N.C. State Univ.

- Warren, Frederick G., Prof. Emeritus of Food Sci. B.S., Kan. State Coll.; M.S., Ph.D., Penn. State Univ.
- Warrick, Woodley Charles, Ext. Assoc. Prof. Emeritus of Biol. & Agri. Engr. B.S., N.C. State Univ.
- Watson, George Carson, Assoc. Prof. Emeritus of Math. A.B., Randolph-Macon Coll.; M.A., Univ. of Va.
- Watts, Norbert Benjamin, Assoc. Dean Emeritus of Stud. Aff. B.S., N.C. State Univ.
- Weathers, Clyde Raymond, Ext. Prof. Emeritus of Econ. B.S., M.S., N.C. State Univ.
- Weaver, John Willis, Jr., Prof. Emeritus of Agri. Engr. B.S., Va. Polytech. Inst. & State Univ.
- Wellman, Frederick Lovejoy, Prof. Emeritus of Plant Path. B.A., Univ. of Wichita; M.S., Ph.D., Univ. of Wis.
- Wells, J. C., Ext. Prof. Emeritus of Plant Path. B.S.A., M.S.A., Univ. of Ga.
- West, John Raymond, Ext. Asst. Prof. Emeritus of Poul. Sci. B.S., Clemson Univ.; M.S., N.C. State Univ.
- Weybrew, Joseph Arthur, Wm. Neal Reynolds Prof. Emeritus of Crop Sci. B.S., M.S., Kan. State Univ.; Ph.D., Univ. of Wis.
- Whaley, Wilson Monroe, Prof. Emeritus of Text. Chem. B.S., M.S., Ph.D., Univ. of Md.
- Wheeler, Mary Elizabeth, Prof. Emeritus of Hist. B.A., Old Dominion Univ.; M.A., Ph.D., Univ. of N.C. at Chapel Hill.
- White, Estelle Edwards, Assoc. Prof. Emeritus of Adult & Comm. Coll. Ed. A.B., E. Carolina Univ.; M.Ed., Ed.D., N.C. State Univ.
- White, Raymond Cyrus, Prof. Emeritus of Chem. B.S., Davis & Elkins Coll.; M.S., Ph.D., W. Va. Univ.
- Whitfield, Fred Elwood, Ext. Prof. Emeritus of For. & Entom. B.S., N.C. State Univ.; M.S., Syracuse Univ.
- Whitfield, John Kerr, Prof. Emeritus of Mech. Engr. B.M.E., M.S., N.C. State Univ.; Ph.D., Va. Polytech. Inst. & State Univ.
- Whitford, Larry Alston, Prof. Emeritus of Bot. B.S., M.S., N.C. State Univ.; Ph.D., Ohio State Univ.
- Williams, Porter Jr., Prof. Emeritus of Engl. A.B., Univ. of the South; M.A., Univ. of Va.; B.A., M.A., Cambridge Univ. (England).
- Williamson, James Claude, Jr., Prof. Emeritus of Econ. & Bus. B.S., M.S., N.C. State Univ.
- Winkler, Edwin Weems, Assoc. Prof. Emeritus of Elect. Engr. B.S., Mont. State Coll.; M.S., Univ. of N.C. at Chapel Hill.
- Winton, Lowell Sheridan, Prof. Emeritus of Math. B.S., Grove City Coll.; M.A., Oberlin Coll.; Ph.D., Duke Univ.
- Wise, George Herman, Wm. Neal Reynolds Prof. Emeritus of Ani. Sci. B.S., Clemson Agri. Coll.; M.S., Ph.D., Univ. of Minn.
- Woltz, William Garland, Prof. Emeritus of Soil Sci. B.S., N.C. State Univ.; Ph.D., Cornell Univ.
- Womble, Charlotte Mae, Ext. Prof. Emeritus of Ext. Home Ec. A.B., E. Carolina Univ.; M.S., Women's Coll. of the Univ. of N.C. at Greensboro.
- Woodard, Joseph Raymond, Ext. Prof. Emeritus of Ani. Sci. B.S., M.S., N.C. State Univ.
- Woodburn, James, Prof. Emeritus of Mech. Engr. B.S.M.E., Purdue Univ.; Dr. Engr., Johns Hopkins Univ.
- Woodbury, Arthur Joseph, Asst. Prof. Emeritus of Text. Research.
- Woodhouse, William Walton, Jr., Prof. Emeritus of Soil Sci. B.S., M.S., N.C. State Univ.; Ph.D., Cornell Univ.
- Wooldridge, Oscar B., Coord. Emeritus of Rel. Aff. B.A., Randolph-Macon Coll.; M.Div., Yale Univ.
- Work, Robert Wyllie, Prof. Emeritus of Text. B.S., Univ. of Ill.; Ph.D., Cornell Univ.
- Young, David Allen, Jr., Prof. Emeritus of Entom. B.A., Univ. of Louisville; M.S., Cornell Univ.; Ph.D., Univ. of Kan.
- Young, James Neal, Prof. Emeritus of Soc. & Anth. B.S., Clemson Univ.; M.S., Ph.D., Univ. of Ky.
- Young, Talmage Brian, Assoc. Prof. Emeritus of Occup. Ed. B.S., M.A., Ed.D., Univ. of Fl.
- Zeiger, Donald Carl, Assoc. Prof. Emeritus of Hort. Sci. B.S., Ohio State Univ.; M.S., Kan. State Univ.; Ph.D., Rutgers Univ.
- Zobel, Bruce J., Edwin F. Conger Prof. Emeritus of For. B.S., M.F., Ph.D., Univ. of Calif. at Berkeley.
- Zumwalt, Lloyd Robert, Prof. Emeritus of Nucl. Engr. B.S., Univ. of Calif. at Berkeley; Ph.D., Calif. Inst. of Tech.

INDEX

A

Academic fields of study and degrees, 14-20
 Academic honors, 51
 Academic policies and procedures, 46-59
 Academic programs, special, 23-26
 Academic Skills Program, 59
 Academic Suspension Policy, 52-3
 Academic Warning, 52
 Accreditation, 6
 Accounting curriculum, 198; courses, 287-89
 Achievement tests, 33
 Administration and Offices, NCSU, 8-9
 Administrative Council, NCSU, 463
 Admissions, 31-35
 Adult and Community College Education, 80
 Advanced placement, 33
 Advising, academic, 46-47
 Aerospace Engineering curriculum, 170
 Aerospace Studies Department (Air Force ROTC), 248-49; courses, 294-95
 Agricultural Communications courses, 286-87
 Agricultural Economics, 95
 Agricultural Education curriculum, 128-29
 Agricultural Education Foundation, Inc., N.C., 263
 Agricultural Extension Service, 114-15
 Agricultural Institute, Two-Year, 15, 115-116; admission requirements for, 32; classification of students, 47
 Agricultural Research Service, 114
 Agriculture and Life Sciences, School of, 73-116; courses, 289
 Agronomy curriculum, 81-83
 Air Force ROTC, 248-49
 Alexander International Program, 27
 Alpha Lambda Delta, 51
 Alumni Association, 265-66
 Anatomy, Physiological Sciences, and Radiology Department, 245
 Animal Science Department, 83-85; courses, 289-91
 Anthropology Concentration, 208; courses, 291-93; minor in, 209
 Applied Mathematics Option, 224
 Architecture Department, 118-120; courses, 293
 Army ROTC, 247-48
 Arts Studies, 20-21
 Associate of the Textile Institute (ATI) Diploma, 231
 Athletic Grants-In-Aid, 43
 Athletics, Intercollegiate, 67
 Athletics, Intramural, 67-68
 Audits (Undergraduate), 58

B

Basic Educational Opportunity Grant, 43
 Biochemistry Department, 85-86; courses, 297-98
 Biological and Agricultural Engineering Department, 86-88, 152-53; courses, 295-97
 Biological Sciences, 88-90; courses in, 299-300
 Biology Field Laboratory, 256-257
 Biomathematics courses, 298
 Board of Governors of The UNC System, 458
 Board of Trustees, NCSU, 463
 Board of Trustees of the Endowment Fund of NCSU, 263
 Botany Department, 90-91; courses, 298-99
 Business Management curriculum, 198

C

Caldwell, John T., Alumni Scholarship, 22
 Calendar, academic, 10-13
 Career Planning and Placement Center, 60

Chemical Engineering Department, 154-56; courses, 306-8
 Chemistry Department, 213-15; courses, 304-6
 Civil Engineering Department, 156-59; courses, 300-4
 Classification of students, 47
 CLEP, 35
 Clothesline, 61
 Clubs and societies, 63-64
 College Level Examination Program (CLEP), 35
 College Work-Study Program, 44
 Communications and Signal Processing, Center for, 257
 Companion Animal and Special Species Medicine Department, 245
 Computer Science Department, 214-17; courses, 309-14
 Computer Studies Program, 163, 217; courses, 314-15
 Computers, purchased by students in engineering, 150
 Computing, University, 255-56
 Conservation curriculum, 91-92, 178-180
 Cooperative Education Program, 24; fees for, 38; in engineering, 152; in humanities and social sciences, 194-5; in textiles, 232
 Cooperating Raleigh Colleges, 25-26
 Counseling, 60
 Course descriptions, 285-454
 Course load, semester, 48
 Course Repeat Policy, 55-6
 Course prefixes, 285-86
 Crafts Center, 66
 Credit by Examination, 56
 Credit by Examination through Independent Study, 57
 Credit-only option for free elective courses, 57-58
 Criminal Justice Option, 206, 209
 Crop Science Department, 93; courses, 308-9
 Curricula in Agriculture and Life Sciences, 76-109
 Curriculum Materials Center, 255

D

D. H. Hill Library, 254
 Dairy Foundation, Inc., N.C., 263
 Dairy Science, 93 (See Animal Science, 83)
 Dean's List, 51
 Degrees: graduate, 18-20; professional, 17; undergraduate, 17-18
 Design Department, 118; courses, 316-20
 Design Foundation, Inc., NCSU School of, 264
 Design Fundamentals courses, 315
 Design, School of, 117-26
 Division of University Studies, 210
 Dropping and Adding Courses, 37

E

Economics and Business Department, 94-96, 196-99; courses, 321-25
 Education courses, 329-37
 Education, General Studies curriculum, 129-130
 Education, School of, 127-147
 Electric Power Research, Center for, 257
 Electrical and Computer Engineering Department, 160-63; courses, 326-29
 Electron Microscope Facilities, 258-59
 Emergency short-term loans, 44
 Emeritus Faculty, 502-9
 Employment Service, Student, 44
 Engineering courses, 320-21
 Engineering Foundation, N.C., 263
 Engineering Operations courses, 343
 Engineering Scholars Program, 151
 Engineering, School of, 148-75; courses, 320-21
 English Department, 199-200; courses, 337-42; minor in, 200

English for Foreign Students, 344-45

English Teacher Education, 131

Entomology Department, 96; courses, 342

Evening classes, credit and noncredit, 252-53

Evening undergraduate degree programs, 24

Expenses, other than tuition and general fees, 38

Extension, University, 251-54

F

Faculty adviser, responsibilities of, 46-47

Faculty and other academic personnel, 465-502

Faculty Scholarships for Juniors and Seniors, University, 23

Financial Aid, 42, 44

Fisheries and Wildlife Sciences curriculum, 113-118; courses, 356-57

Food Animal and Equine Medicine Department, 245

Food Science Department, 97-99; courses, 355-56

Food Service, 60

Foreign Languages and Literatures Department, 201-202; courses, 343-44; minor in, 202

Foreign Students, 26-27

Forest Resources, School of, 176-190

Forestry Department, 180-182; courses, 352-55

Fraternities, 46

French Language and Literature courses, 345-46

French Teacher Education Option, 131

Freshman Admission, 31-32

Furniture Manufacturing and Management Curriculum, 165-66

G

General Administration of The UNC System, 458

General education distribution requirements, 69-70

Genetics Department, 99; courses, 358

Geology curriculum, 219-21; courses, 389-92

German Language and Literature courses, 346-47

Grade point average, 50

Grade reports, 51-52

Grading system, 49-50

Graduate degrees, 18

Graduate School, 251

Graduate Students, admission requirements for, 35

Graduation Requirements, 70

Grants, 43; for study abroad, 28

Graphic Communications courses, 357-58

Greek Language and Literature courses, 358-59

Guaranteed Student Loans, 44

H

Handicapped Students, 60-61

Health, 61

Health Occupations Teacher Education, 131-32

Hebrew Language and Literature courses, 347

Highlands Biological Station, 259

Hill Library, D.H., 254

Historical sketch, NCSU, 459-60

History Department, 202-3; courses, 360-67

History of Art courses, 359

Honors designations for undergraduate degrees, 51

Honorary Societies, 63, 74

Honors Programs, 21; in agriculture and life sciences, 74; in humanities and social sciences, 193; in textiles, 230

Horticultural Science Department, 99-101; courses, 367-69

Housing for Married Students, 45

Human Resource Development Option in Psychology, 145-47

Humanities and Social Sciences, School of, 191-210; courses, 369

Humanities Foundation, Inc., NCSU, 264

I

Immunization, required documentation, 36

Independent Study, credit by examination through, 57

Individualized Study Program, ALS, 101

Industrial and Technical Education Program, 133-35

Industrial Arts courses, 369-70

Industrial Arts Education curriculum, 132-33

Industrial Engineering Department, 164-65; courses, 371-75; minor in, 164

Information Services, Office of, 265

Institute of Statistics, 259

Institutional loans, 44

Insurance, accident and health, 59

Integrated Manufacturing Systems Engineering Institute, 259

Intercollegiate Athletics, 67

Interdisciplinary Studies, 210

Interinstitutional registration, 37

International programs and activities, 26-31

International students, 26-27

International Student Exchange Program, 29

International Studies Concentration: agriculture and life sciences, 75; humanities and life sciences, 194

International Trade Center, 254

Intra-campus transfers, 55-58

Intramural-recreation sports, 67-68

Italian Language and Literature courses, 348

J

Japan Center, 260

Japanese Language and Literature courses, 348-49

Jefferson Scholars in Agriculture and the Humanities, 74-75

Journalism Concentration, 194, 210

K

King Village, E. S., 45

L

Laboratory and computer course fees, 39

Landscape Architecture Department, 121-22; courses, 375

Latin Language and Literature courses, 375

Laundry and Dry Cleaning, 61

Law and Political Philosophy Concentration, 207

Leadership Training, 66

Libraries, University, 254-55

Lifelong Education, Division for, 252-53

Lifelong education students, admissions requirements for, 34

Linen rental, 61

Loans, 43

M

Marine, Earth, and Atmospheric Sciences Department, 217-22; courses, 389-95

Married Student Housing, 45

Materials Science Engineering Department, 166-68; courses, 385-88

Materials Research Center, 259-60

Mathematics and Science Education Department, 136-38

Mathematics Department, 223-25; courses, 375-80

McKimmon Center for Extension and Continuing Education, Jane S., 254

Mechanical and Aerospace Engineering Department, 168-71; courses, 380-85

Medical Technology curriculum, 101

Merit Awards Program for Entering Freshmen, University, 22
 Metcalf Living-Learning Program, 25
 Meteorology curriculum, 222; courses, 393-94
 Microbiology Department, 102; courses, 388-89
 Microbiology, Pathology, and Parasitology Department, 245
 Microelectronics Center of North Carolina, 260
 Middle Grades Education Programs, 139-43
 Military Education and Training, 247-51
 Military Science Department (Army ROTC), 247-48; courses, 395-96
 Minority Presence Grants, 43
 Multi-Disciplinary Studies Program, 203-4
 Music Department, 247; courses, 396-97
 Musical organizations, 64-65
 Musician-in-Residence, 65

N

National Direct Student Loans, 43
 National Student Exchange Program, 26
 Naval Science (Naval ROTC) Cross-Enrollment with UNC-CH, 250-51; courses, 399-400
 Need-based scholarships for freshmen and continuing students, 43
 N.C. 4-H Development Fund, Inc., 264
 N.C. Student Incentive Grant, 43
 NCS Pipes and Drums, 65
 Non-degree certificate programs, 24-25
 Nondiscrimination Policy, 7
 North Carolina State Fellows Program, 26
 North Carolina State Japan Center, 260
 North Carolina State University, 5-6, 459-62
 North Carolina State University Education Foundation, Inc., 264
 North Carolina State University Foundation, Inc., 264
 Nuclear Engineering Department, 171-172; courses, 397-99
 Nuclear Laboratory, Triangle Universities, 262
 Nuclear Measurements and Analysis Division, 260-61
 Nutrition Concentration, 90; courses, 400

O

Occupational Education, Center for, 257
 Off-campus credit courses and programs, 252
 Off-campus housing, 45
 Operations Research courses, 400-1
 Orientation, 35-36
 Out-of-state students, admission requirements for, 33

P

Parents' Association, NCSU, 264
 Peer Mentor Program, 62
 Pell Grants, 43
 Pershing Rifles, 66
 Pest Management for Crop Protection curriculum, 102-3; courses, 408-9
 Pesticide Residue Research Laboratory, 261
 Phi Eta Sigma, 51
 Phi Kappa Phi, 51
 Philosophy and Religion Department, 204-5; philosophy courses, 406-8; religion courses, 421-23
 Physical and Mathematical Science, Foundation, Inc., N.C., 263
 Physical and Mathematical Sciences, School of, 211-28
 Physical Education Department, 205; courses, 402-5
 Physics Department, 225-26; courses, 419-21
 Physiology courses, 416-18
 Phytotron, 262
 Plant Disease and Insect Clinic, 261
 Plant Pathology Department, 104; courses, 410-11

Political Science and Public Administration Department, 206-7; courses, 411-15
 Portuguese Language and Literature courses, 349
 Post-baccalaureate Studies Students (PBS), classification as, 48
 Poultry Science Department, 104-6; courses, 409-10
 Precision Engineering Center, 261
 Pre-Law Program, 15, 194
 Pre-Medical Science, 15-16, 106, 212
 Pre-Professional Programs, 15, 109-110
 Preregistration, 36
 Product/Visual Design Department, 122-26; product design courses, 401-2
 Professional Degrees, School of Engineering, 174-75
 Psychology Department, 143-47
 Public Administration courses, 401
 Public Relations Committee, 265
 Pulp and Paper Foundation, Inc., The, 264
 Pulp and Paper Science and Technology curriculum, 185-88

R

Readmission of former and suspended students, 53-55
 Recreation Resources Administration Department, 182-84; courses, 423-25; minor in, 184
 Refund Policy: residence hall, 45; tuition, 39
 Registration, 36-37
 Religious Studies Concentration, 205
 Repeating courses, 55-56
 Reproductive Physiology Research Laboratory, 261
 Research centers and facilities, 256-62
 Research Triangle, 256
 Residence halls, 45
 Residence status for tuition purposes, 40-42
 Residential Scholars Program, 21
 R.J.R. Nabisco Tutelage Program, 151
 Role and mission of NCSU, 460-62
 Room rental and reservations, 45
 Russian Language and Literature courses, 349-50

S

Schedule Changes-Drops and Adds, 37
 Scholars and Honors Programs, 21, 30, 128, 212
 Scholarships, 22-23, 128, 171, 177, 186, 189, 193-94, 204, 223, 231; for study abroad, 28
 Scholastic Aptitude Test, 33
 School and Departmental Scholarships for Continuing Students, 23
 Scottish College of Textiles Exchange Program, 231
 Sea Grant College Program, 262
 Semester in Santander, Spain, 29-30
 Servicemen's Opportunity Colleges, 34-35
 Short courses, institutes, and conferences, 252
 Social Studies Teacher Education curriculum, 147
 Social Work curriculum, 209; courses, 436-37
 Sociology and Anthropology Department, 106-8, 207-9; sociology courses, 425-28
 Soil Science Department, 108-9; courses, 433-34
 Sororities, 46
 Sound and Vibration, Center for, 258
 Southeastern Plant Environment Laboratory-Phytotron, 262
 Spanish Language and Literature courses, 350-52
 Spanish Teacher Education, 147
 Special academic programs, 26
 Speech-Communication Department, 209-10; courses, 429-33
 Statistics Department, 227-28; courses, 434-36
 Statistics, Institute of, 259
 Stewart Theatre, 66
 Student Activities, 63-68
 Student Center, University, 65; programs at, 66
 Student Government, 63

Student Housing, 44-46
 Student Publications, 64
 Student Services, 59-63
 Students Supply Stores, 62
 Study Abroad Office, 28
 Study skills training, 59
 Study, travel, and short-term employment abroad, 28-31
 Summer Institute in English for Speakers of Other Languages, 27
 Summer Sessions, 253
 Summer Study at Oxford, England, 30
 Summer Study in London, England, 30
 Summer Study in Mexico, 30
 Supplemental Educational Opportunity Grants, 43
 Suspension policy, academic, 52-3

T

Teacher Education Option in English, 200
 Technical Education curriculum, 134-35
 Textile Chemistry Department, 233-36; courses, 439-40
 Textile Design Concentration (in Product Design) 124; (in Visual Design), 126
 Textile Engineering courses, 441
 Textile Engineering and Science Department, 236-38; courses, 441-43
 Textile Foundation, Inc., N.C., 263
 Textile Management and Technology Department, 238-43; courses, 443-46
 Textile Scholars in Residence Program, 231
 Textiles, School of, 229-43; courses, 438-39
 Thompson Theatre, 66
 Tobacco Foundation, Inc., N.C., 264
 TOEFL test (Test of English as a Foreign Language), 27
 Toxicology courses, 446
 Transcripts of academic record, 71
 Transfer credit, 55
 Transfer students: admission requirements for, 33-34; effect on residence status, 42; residence requirements for graduation, 70
 Transportation, 62-63
 Triangle Universities Nuclear Laboratory, 262
 Tuition and Fees, 37-39
 Two degrees, 71, 189; in engineering, 149

U

Unclassified students, admission requirements for, 34, 37
 Undergraduate degrees and degree options, 17
 Undergraduate minors, 16, 71 (*See also* specific department)
 Undergraduate Studies (UGS) students: classification as, 47
 University Development, 263-64
 University Extension, 251
 University Libraries, 254
 University of North Carolina, The, 457
 University Relations, 265
 University Studies, Division of, 210; courses, 446-48
 University Undesignated Freshman Program, 23
 Urban Affairs and Community Services, Center for, 253

V

Valedictorian, salutatorian, and highest ranking scholar in a school, 51
 Veterinary Medicine Foundation, Inc., N.C. 264
 Veterinary Medicine, Pre-professional Program, 109-10, 244-45
 Veterinary Medicine, School of, 244-45; courses, 448-49
 Visas, and passports for U.S. students, 28-29; international students, 27
 Visual design (*See* Product/Visual Design Department, 122-26); courses, 448
 Vocational Industrial Education curriculum, 133

W

Water Resources Research Institute, 262
 Withdrawal from the University, 53
 Wood and Paper Science Department, 185-90; courses, 449-52
 Wood Science and Technology curriculum, 188-90
 Work-Study Program, College, 44
 Writing and Editing Option in English, 200

Z

Zoology Department, 110-13; courses, 452-54

NORTH CAROLINA STATE UNIVERSITY

F

E

D

C

B

A


1

2

3

4

5

-  Access Key
- can be entered by an individual in a wheelchair with no assistance
 - can be entered by an individual in a wheelchair with minimum assistance
 - N S E W—indicates side of building with accessible entrance
 - passenger elevator
 - freight elevator
 - T accessible toilet



ACCESS	NO.	BUILDING NAME
	1	Alexander Residence Hall
	2	Alumni Memorial Building
	3	Bagwell Residence Hall
	4	Beckon Residence Hall
	5	Berry Residence Hall
E	6	Biltmore Hall
	7	Bowen Residence Hall
	8	Bragaw Residence Hall
● N T	9	Brooks Hall
● N	10	Brooks Hall Addition
■ N	11	Broughton Hall
N	12	Burlington Engineering Labs
E	13	Burroughs Mines
	14	Carmichael Gymnasium
	15	Carroll Residence Hall
● N	16	Cage Athletics Center
	17	Central Stores
	18	Chancellor's Residence



NORTH CAROLINA

Agricultural Institute



TWENTY-SIXTH
COMMENCEMENT

University Student Center

North Carolina State University

May 8, 1987



TWENTY - SIXTH
AGRICULTURAL INSTITUTE
EXERCISES OF GRADUATION

School of Agriculture and Life Sciences

Durward F. Bateman, Dean

Presiding

May 8, 1987

3:00 p.m.

*PROCESSIONAL

*INVOCATION.....David A. Wilson
Associate Pastor/Administrator
Hayes Barton Baptist Church
Raleigh, North Carolina

ADDRESS.....James B. Oliver
Agricultural Advisor to the Governor
Raleigh, North Carolina

AWARDING OF DIPLOMAS.....Durward F. Bateman, Dean
James L. Oblinger, Associate Dean and Director
of Academic Affairs

H. Bradford Craig, Associate Director of Academic Affairs
and Director of the Agricultural Institute
School of Agriculture and Life Sciences

STUDENT COMMENCEMENT SPEAKER.....David E. Burchett

REMARKS.....Bruce R. Poulton
Chancellor
North Carolina State University

RECOGNITION OF MARSHALS.....Durward F. Bateman, Dean

*BENEDICTION.....David A. Wilson

*RECESSIONAL

Reception Immediately Following the Graduation Ceremony

*Please Stand

May 8, 1987

AGRICULTURAL EQUIPMENT TECHNOLOGY

★ † David Westwood Conner
Brian James Keasling

AGRICULTURAL PEST CONTROL

† ‡ Barry Christopher Stephens

FIELD CROPS TECHNOLOGY

★★ • John Edward Ashe, Jr.
Stephen Brooks Averette
Chad Clinton Blake
† David Stuart Ferrell
Mel Alan Ferrell
† ‡ Randolph Bryan Grinnan, IV
★ William Shawn Harding
† ‡ Christopher Allen Harrell
★ Jeffrey Oliver Preddy

FOOD PROCESSING, DISTRIBUTION, AND SERVICE

† Stephen Alexander Ballentine
† Glen Lin Carrington
★ Thomas Antony Chason
★★ Linda Diane Davis
★ Eric Scott Fowler
† Larry Steven Martin
★ Russell Lawrence Price
★★ • Charles Wayne Reavis
Timothy Wade Smith
Ronald Dunston Wynn, Jr.

GENERAL AGRICULTURE

Anthony Grant Allen
Jerry Alfred Bryant
James Harrison Ferebee, III
‡ Nelson Randolph Garrett
★ Trevor Shea Houston
★★ Daniel Arthur Jones
William Todd Kelly
Henry Travis Pulley, II
John Little Clay Skinner
William Spencer Yager

LIVESTOCK MANAGEMENT AND TECHNOLOGY

Jeffrey Garland Barwick
Herman Douglas Batten
★ † ‡ Emily Grey Bowles
• Russell Leon Brock
★★ Gerald Christopher Conrad
† Gregory McCoy Hughes
Marsha Jane McCraw
† Gary Watson Pilchard

Richard Bryant Price
Robert Lindsay Smith
Thomas Worth Smith
Derek Lee Teague

ORNAMENTALS AND LANDSCAPE TECHNOLOGY

Billy Ray Cagle, Jr.
† ‡ Lisa Susan Copensky
★ Kevin Lee Gantt
★★ • Ronald Ray Gilmore
★★ † Dawn Marie Dampier McClernon
† ‡ Mark Warren Morgan
† ‡ Mark Blaine Pilcher
† Vicki Lynn Sutton
★ Samuel Paul Wilkins
★ Kimberly Jo Woodall

TURFGRASS MANAGEMENT

★★ † ‡ Ian Gordon Brown
† ‡ Marshall Craig Doxey
† ‡ James Futrelle Flythe
† ‡ Robert Craig Hunter
† ‡ Dennis F. King
Mark Vincent Magnarella
‡ James Bristol Rouse, Jr.
Darrin Lewis Waters

DOUBLE MAJORS

+ Lance Standley Bass
Ronald Mac Beasley
† ‡ Mark Bryan Bradley
† ‡ Daniel Stevenson Brite
Thomas Henry Bullock
★★ Edward Danny Bunch
★ David Eugene Burchett
★ John Andrew Clapp
+ Ron Ervin Cottle
Frederick Wentworth Ford, III
★ + Stephen Christopher Glover
★★ Robert Stephen Hearn
† Keith Antonio Hines
Thomas Dale Hobbs
★ Sherry Ruegner Howard
★ † ‡ Frank Ramey Livesay, II
Robert Neely Nance, III
★ John Stephen Peters
Scott Anthony Phthisic
★ + Donald Davis Sain
Roger Lee Smith
★ Paul Hoytt Ward, III
Robert Brooks Wilson

★★ High Honors

★ Honors

• Agribusiness Concentration

+ Graduated December, 1986 and May, 1987

† Graduated December, 1986

‡ In Absentia

MARSHALS

Mark Timothy Clark

Michael Scott Hardman

Michael Ernest Hayes

Charles Wayne Herlocker

Calvin Larkin Peed



NC **SU**
1887 1987
designing a new century

